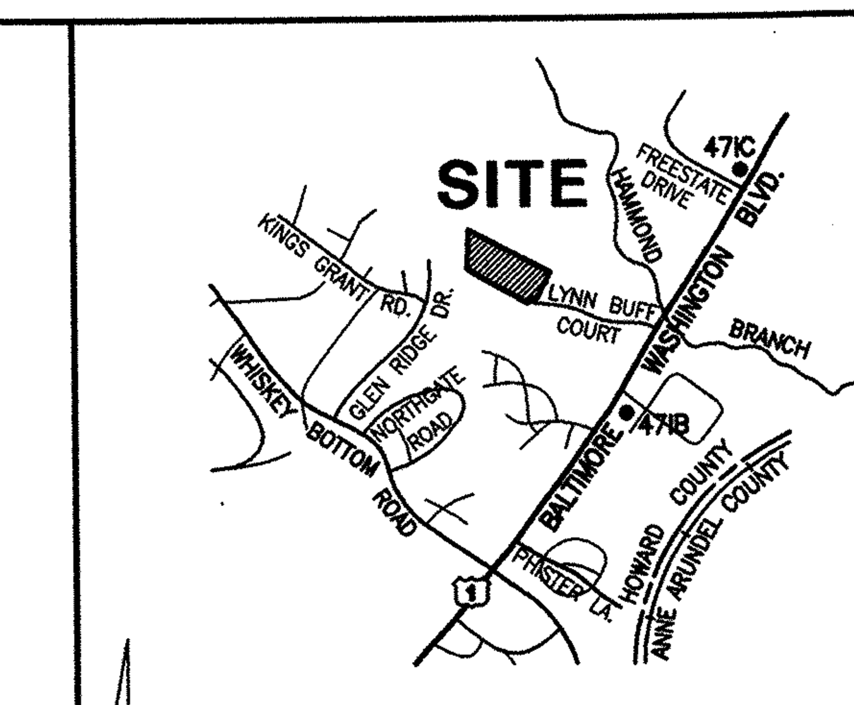
SITE DEVELOPMENT PLAN

U.S. No. 1 JOINT VENTURE

PARCEL "A", PLAT CMP No. 3592, WAREHOUSE
GUILFORD ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND
CENSUS TRACT 6069.02, TAX MAP 47, BLOCK 22/23
WATER CODE C04, SEWER CODE 7220000



VICINITY MAP

SCALE: 1"=2000'
HOWARD Co. MAP PAGE 20; GRID B-10

IPDS
The Interprofessional PLANNING & DESIGN STUDIO, LLC
Engineers • Architects • Surveyors
Planners & Landscape Architects
802 Sligo Avenue
Silver Spring, Maryland, 20910
(301) 585-5676

LIST OF DRAWINGS

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS, BUREAU OF ENGINEERING, AND CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
4. TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTED). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
5. ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED. THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH TWO FOOT CONTOUR INTERVALS PREPARED BY JOYCE ENGINEERING CORPORATION, DATED OCTOBER, 1987.
6. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 47IB AND 47IC WERE USED FOR THIS PROJECT.
7. WATER IS PUBLIC, EX. WHC. CONTRACT No. 667-D-W&S.
8. SEWER IS PUBLIC, EX. SHC. CONTRACT No. 667-D-W&S.
9. STORMWATER MANAGEMENT CONTROL IS TO BE PROVIDED BY PRIVATE UNDERGROUND STORAGE PIPES WITH INFILTRATION TRENCHES AND WILL BE MAINTAINED BY THE OWNER OF PROPERTY.
10. THERE IS NO FLOODPLAIN ON SITE.
11. THERE ARE NO WETLANDS ON THIS SITE.
12. NO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT.
13. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
14. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
15. THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALLS.
16. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
17. NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO SUBGRADE.
18. ALL STORM DRAIN PIPE BEDDING SHALL BE AS SHOWN IN DETAIL G2.01 (TRENCH IN ROCK OR TRENCH IN EARTH AS DETERMINED BY FIELD CONDITIONS) IN VOL. IV. OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR AS SHOWN ON THE DRAWINGS.
19. THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORM WATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORM WATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS-OF-WAY AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.
20. THE OWNER SHALL PROVIDE A SEPARATE AND INDEPENDENT SEWER CONNECTION FOR EACH TENANT OR OCCUPANT OF ANY BUILDING, SHOWN ON THIS SITE DEVELOPMENT PLAN, WHO WILL DISCHARGE NON-DOMESTIC WASTE TO THE PUBLIC SEWERAGE SYSTEM. IF THIS WASTE IS REGULATED UNDER SECTION 18.122A OF THE HOWARD COUNTY CODE. EACH SEPARATE AND INDEPENDENT SEWER CONNECTION SHALL INCLUDE A STANDARD MANHOLE AND OTHER WATER PRETREATMENT DEVICES AS REQUIRED AND APPROVED BY HOWARD COUNTY. WASTE LINES ON THE INTERIOR OF THE BUILDING SHALL BE DESIGNED, CONSTRUCTED OR MODIFIED SUCH THAT NON-DOMESTIC WASTE WILL BE DISCHARGED TO THE SEPARATE AND INDEPENDENT SEWER CONNECTION. NO PLAN SHALL DISCHARGE REGULATED NON-DOMESTIC WATER TO PUBLIC SEWERAGE SYSTEM PRIOR TO INSTALLATION OF THE SEPARATE AND INDEPENDENT SEWER CONNECTION AND RELATED INTERIOR WASTE LINES. THE ABOVE REQUIREMENTS SHALL APPLY TO ALL INITIAL AND FUTURE OCCUPANTS OR TENANTS.
21. ALL IMPROVEMENTS AS SHOWN ON THESE PLANS WITHIN THE R/W OF LYNN BUFF COURT WILL BE THE RESPONSIBILITY OF THE DEVELOPER.
22. ALL EXTERIOR LIGHTING SHALL CONFORM TO SECTION 134 - OUTDOOR LIGHTING, ZONING REGULATIONS.
23. NO UNDERGROUND/GROUNDWATER TESTING CONDUCTED FOR THE PRESENCE OF CONTAMINANTS AT THIS TIME.
24. WATER METERS SHALL BE LOCATED OUTSIDE THE BUILDING IN THE AREA BETWEEN THE SIDEWALK AND THE PARKING LOT CURB.

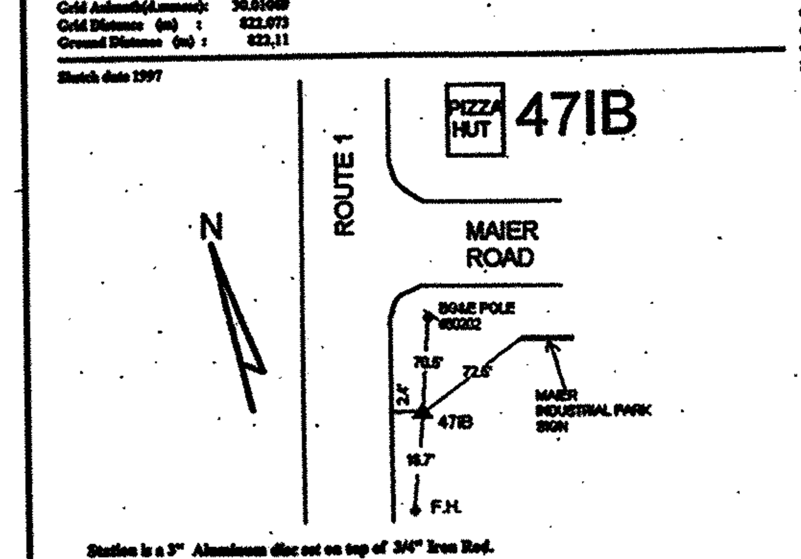
SITE TABULATION

PRESENT ZONING	M-1
DEED REFERENCE	L. 454, F. 036
AREA OF PARCEL	7.527 Ac.
PROPOSED USE	WAREHOUSING & PARKING
PROPOSED BUILDING COVERAGE	115,463 SQ. FT.
PROJECTED No. OF EMPLOYEES	50
TOTAL PARKING SPACES REQUIRED:	
@ 0.5 SPACES PER 1000 SF OF 115,463 SQUARE FEET GROSS FLOOR AREA)	58
@ 3.3 SPACES PER 1000 SF OF 40,909 SQUARE FEET MAX. ALLOWABLE MEZZANINE FLOOR AREA (FUTURE GENERAL OFFICE USE)	135
TOTAL REQUIRED	193
TOTAL PARKING SPACES PROVIDED:	
STANDARD (9'x18')	164
COMPACT (8'x16')	23
HANDICAPPED (8'x20')	6
TOTAL SPACES	193
LOADING SPACES	29
LANDSCAPE ISLANDS REQUIRED:	10
1/20 PARKING SPACES	
@ MINIMUM 200 SF EACH	2000 SF
MINIMUM WIDTH = 12'	
DISTURBED AREA	5.7 Ac. (76%)

PARCEL "A" PLAT FILE NUMBER IS F-75-67
NOTE: THIS PLAN WAS PREVIOUSLY SUBMITTED AS SDP-98-88 AND DENIED ON 5/6/98

HOWARD COUNTY GEODETIC CONTROL: 47IB

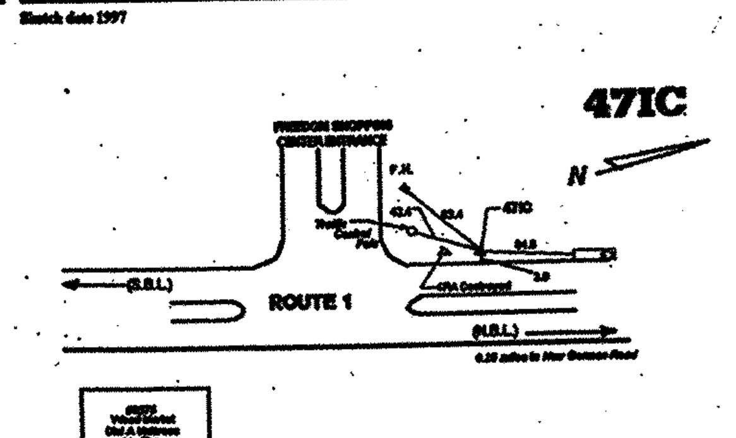
NGS PID NUMBER: N/A — Station is a 3/4" Iron Rod with a 4" Stamped aluminum cap.
Coordinates based on: Maryland NAD83 horizontal and NAVD29 vertical datums. CLASS: Horizontal ...1st Vertical ...2nd
Angles in ddd.mmsss format
Northing: 161453.3643 m = 529701.579 ft. Scale Factor: 0.999958979 Lat: 39.0715617449 N
Easting: 414976.8122 m = 1361469.738 ft. Convergence: 0.06313 Lon: 76.4936507834 W
Elevation: 55.0002 m = 180.709 ft.
Other Datums Information: NAD27N: 460932.8 ft.(App) NAD27E: 849051.1 ft.(App) Ellipsoidal Ht.: 22.433 m. NAVD88 Elev: 54.870 m.
County: Howard Area: Rt1 Last Adjustment: 04/15/1996 Last recovery: 04/15/1997
Azimuth Stations: 47IC N/A N/A
Grid Azimuth(d.mmsss): 30.01060
Grid Distance (m): 822.073
Ground Distance (m): 822.11
Sketch date 1997



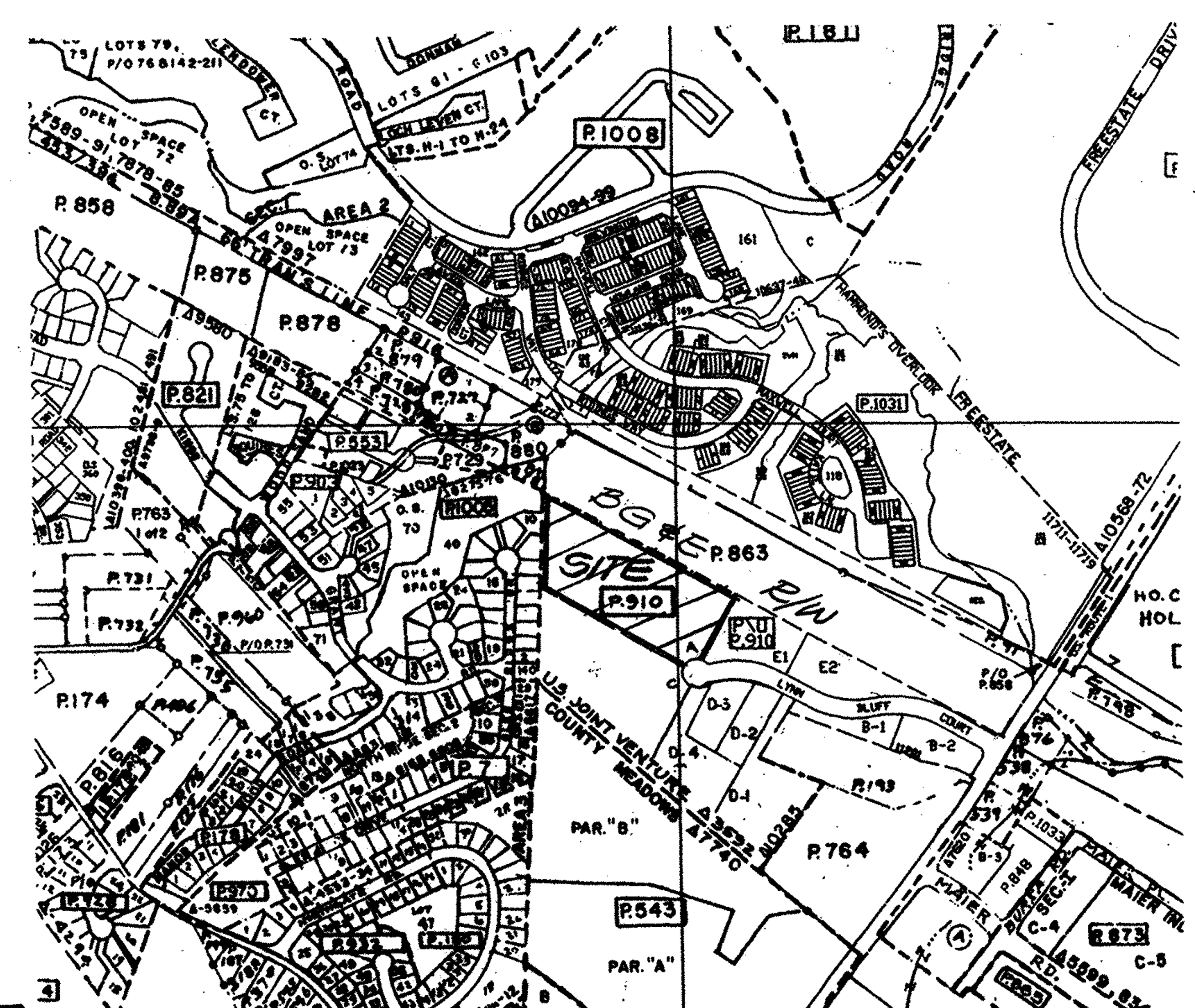
Station is a 3" Aluminum disc set on top of 3/4" Iron Rod.

HOWARD COUNTY GEODETIC CONTROL: 47IC

NGS PID NUMBER: N/A Also: " N/A "
Coordinates based on: Maryland NAD83 horizontal and NAVD29 vertical datums. CLASS: Horizontal ...1st Vertical ...2nd
Angles in ddd.mmsss format
Northing: 162165.1670 m = 532036.885 ft. Scale Factor: 0.999959463 Lat: 39.0730674478 N
Easting: 415388.0797 m = 1362819.058 ft. Convergence: 0.06421 Lon: 76.4919328834 W
Elevation: 57.6216 m = 189.047 ft.
Other Datums Information: NAD27 N: 471288.1 ft.(App) NAD27 E: 850400.5 ft.(App) Ellipsoidal Ht.: 24.968 m. NAVD88 Elev.: 57.830 m.
County: Howard Area: Rt1 Last Adjustment: 04/15/1996 Last recovery: 04/15/1997
Azimuth Stations: 47IB N/A N/A
Grid Azimuth(d.mmsss): 210.01060
Grid Distance (m): 822.073
Ground Distance (m): 822.11
Note: Unless otherwise stated all Howard County survey controls are standard stamped (brass or aluminum) discs set on top of concrete (3' deep) cylindric base. Usually the disc is set 1" or 2" below terrain surface.
Sketch date 1997



NOTE: SEE VICINITY MAP FOR LOCATIONS OF GEODETIC CONTROL POINTS

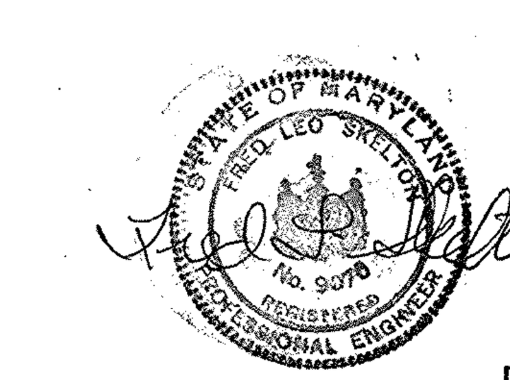


TAX MAP

SCALE: 1"=600'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR	DATE 10/6/98
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 10/5/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 10/1/98



OWNER \ DEVELOPER

Joseph Nazario
Nazario Development and Company
6500 Ammendale Road
Beltsville, Maryland 20705
(301) 937-4664

SDP-98-135

ADDRESS CHART	
BUILDING	STREET ADDRESS
9590	LYNN BUFF COURT

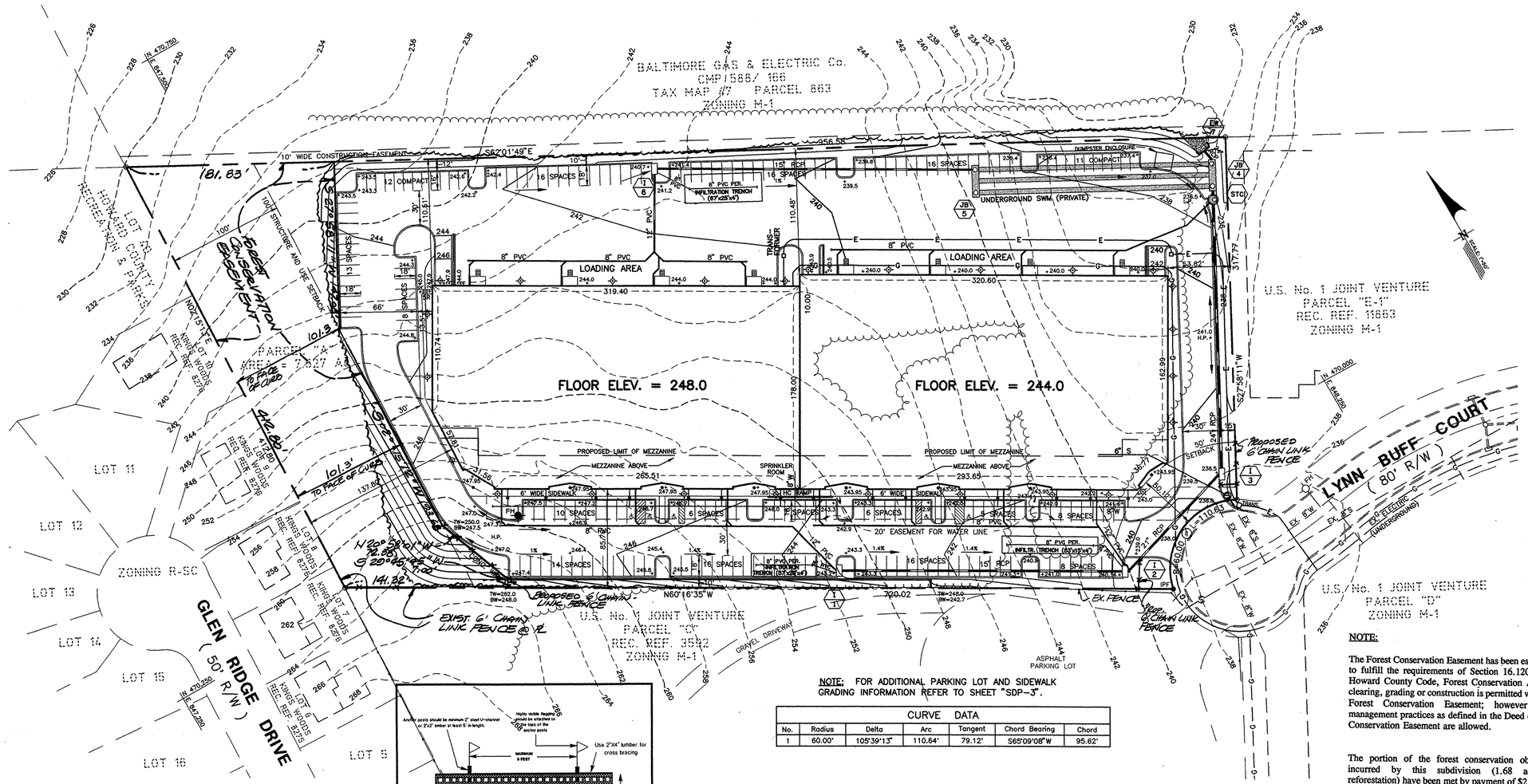
SUBDIVISION NAME:				SECT./AREA:	PARCEL:
U.S. No. 1 JOINT VENTURE				N/A	A
DEED:	BLOCK:	ZONING:	TAX MAP No.:	ELECTION DISTRICT:	CENSUS TRACT:
PLAT 3592	22/23	M-1	47	6th	6069.02
WATER CODE: C04			SEWER CODE: 7220000		

COVER SHEET

U.S. No.1 JOINT VENTURE
PARCEL "A", PLAT CMP No. 3592, WAREHOUSE
GUILFORD ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND
CENSUS TRACT 6069.02, TAX MAP 47, BLOCK 22/23
WATER CODE C04, SEWER CODE 7220000

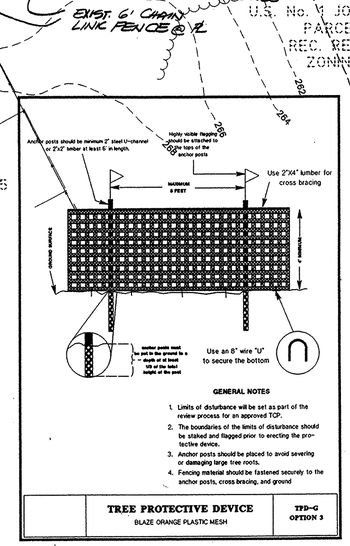
SCALE: NONE
REVISIONS: 06-22-98
DATE: 01-18-98
JOB NUMBER:
CS
SHEET 1 OF 13

SDP-98-135

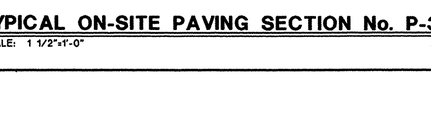


NOTE: FOR ADDITIONAL PARKING LOT AND SIDEWALK GRADING INFORMATION REFER TO SHEET "SDP-3".

CURVE DATA						
No.	Radius	Delta	Arc	Tangent	Chord Bearing	Chord
1	60.00'	105°39'13"	110.64'	79.12'	S65°09'08"W	95.62'



ADJACENT PROPERTY OWNERS	
PROPERTY	OWNER
KINGS WOODS SECTION 1, AREA 1 LOT 6	GARY KUYKENDALL 9536 GLEN RIDGE DR. LAUREL, MARYLAND 20723
KINGS WOODS SECTION 1, AREA 1 LOT 7	MELANIE McKNIGHT 9540 GLEN RIDGE DR. LAUREL, MARYLAND 20723
KINGS WOODS SECTION 1, AREA 1 LOT 8	THIEREY BREANT 9544 GLEN RIDGE DR. LAUREL, MARYLAND 20723
KINGS WOODS SECTION 1, AREA 1 LOT 9	HIEN V. ONG 9548 GLEN RIDGE DR. LAUREL, MARYLAND 20723
KINGS WOODS SECTION 1, AREA 1 LOT 10	ROBERT MARTINEZ 9552 GLEN RIDGE DR. LAUREL, MARYLAND 20723
KINGS WOODS SECTION 1, AREA 1 LOT 40	HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS
CMP 588/166 TAX MAP 47	BALTIMORE GAS & ELECTRIC Co. P.O. BOX 1475 BALTIMORE, MARYLAND 21203-1475
U.S. No. 1 JOINT VENTURE PARCEL "E"	LYNN BUFF LIMITED PARTNERS 9550 LYNN BUFF CT. LAUREL, MARYLAND 20723-6324
U.S. No. 1 JOINT VENTURE PARCEL "C"	STEFINTRACO A. SWISS CORPORATION c/o GREGORY PNELL 8401 CONNECTICUT AVE. CHEVY CHASE, MARYLAND 20815



TYPICAL ON-SITE PAVING SECTION No. P-3

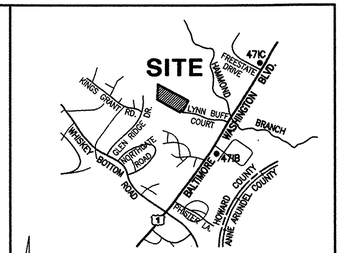
SCALE: 1 1/2"=1'-0"

GENERAL PAVING NOTES

1. All roadway construction shall be in accordance with the General Specifications for Highway and street Construction, the Howard County Code and the Howard County Road Ordinance.
2. Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location and elevation of the mains by digging test pits by hand at utility crossings well in advance of trenching. If clearances to water and sewer lines are less than shown on this plan or twelve (12) inches, contact the Engineer before proceeding with construction.
3. All elevations shown on these plans are referred to Maryland State and Howard County vertical datum.
4. All roadway fillet radii shall be 25 feet, unless otherwise noted.
5. All unpaved areas within the property or right-of-way shall be sodded.
6. All curb and gutter shall be in accordance with Howard County Standard No. R-3.01.
7. All sidewalks shall be in accordance with Howard County Standard No. R-3.05, unless otherwise noted.
8. Provide Standard No. R-4.01 sidewalk ramps Type A at locations shown on the plans.
9. The pavement subgrade is to be approved by the Howard County Inspector prior to installation of Base Course.
10. Underdrain system shall be installed when warranted by field conditions or as required by the Howard County Inspector.

LEGEND

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE	℄	
TREELINE		
CONTOUR LINE	250	250
SPOT ELEVATION		+250
STORMDRAIN PIPE		
LIMIT OF DISTURBANCE		L.O.D.
SILT FENCE		S.F.
HANDICAPPED SPACE		
FIRE HYDRANT	FH	FH
CURB & GUTTER		
WHEELCHAIR RAMP		
TOP OF WALL		T.W.
BOTTOM OF WALL		B.W.
WATER METER VAULT (3/4" METER & 1" WHC)		
SITE LIGHTING FIXTURE MOUNTED ON BLDG.		



VICINITY MAP

SCALE: 1"=2000'

HOWARD Co. MAP PAGE 20; GRID B-10

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTIONWILL BE DONE IN ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. ~~I/WE WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN AS-BUILT PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~ I/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

JOSEPH NAZARIO, OWNER
NAZARIO DEVELOPMENT AND COMPANY — 5-1-98 DATE

BY THE ENGINEER:

I/WE CERTIFY THAT THIS PLAN FOR ~~POND CONSTRUCTION~~, SOIL EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. ~~I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~

FRED L. SKELTON - MD. REGISTRATION No. 9070
IPDS, LLC — 6/5/98 DATE

THESE PLANS SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

NATURAL RESOURCES CONSERVATION SERVICE — 9/3/98 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

HOWARD SOIL CONSERVATION DISTRICT — 9/3/98 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — 10/6/98 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT — 10/5/98 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — 10/1/98 DATE

NOTE:

The Forest Conservation Easement has been established to fulfill the requirements of Section 16.1200 of the Howard County Code, Forest Conservation Act. No clearing, grading or construction is permitted within the Forest Conservation Easement; however, forest management practices as defined in the Deed of Forest Conservation Easement are allowed.

The portion of the forest conservation obligations incurred by this subdivision (1.68 acres of reforestation) have been met by payment of $21,954.24 to the Howard County Forest Conservation Fund.

OWNER \ DEVELOPER

Joseph Nazario
Nazario Development and Company
6500 Ammendale Road
Beltsville, Maryland 20705
(301) 937-4664

SDP-98-135

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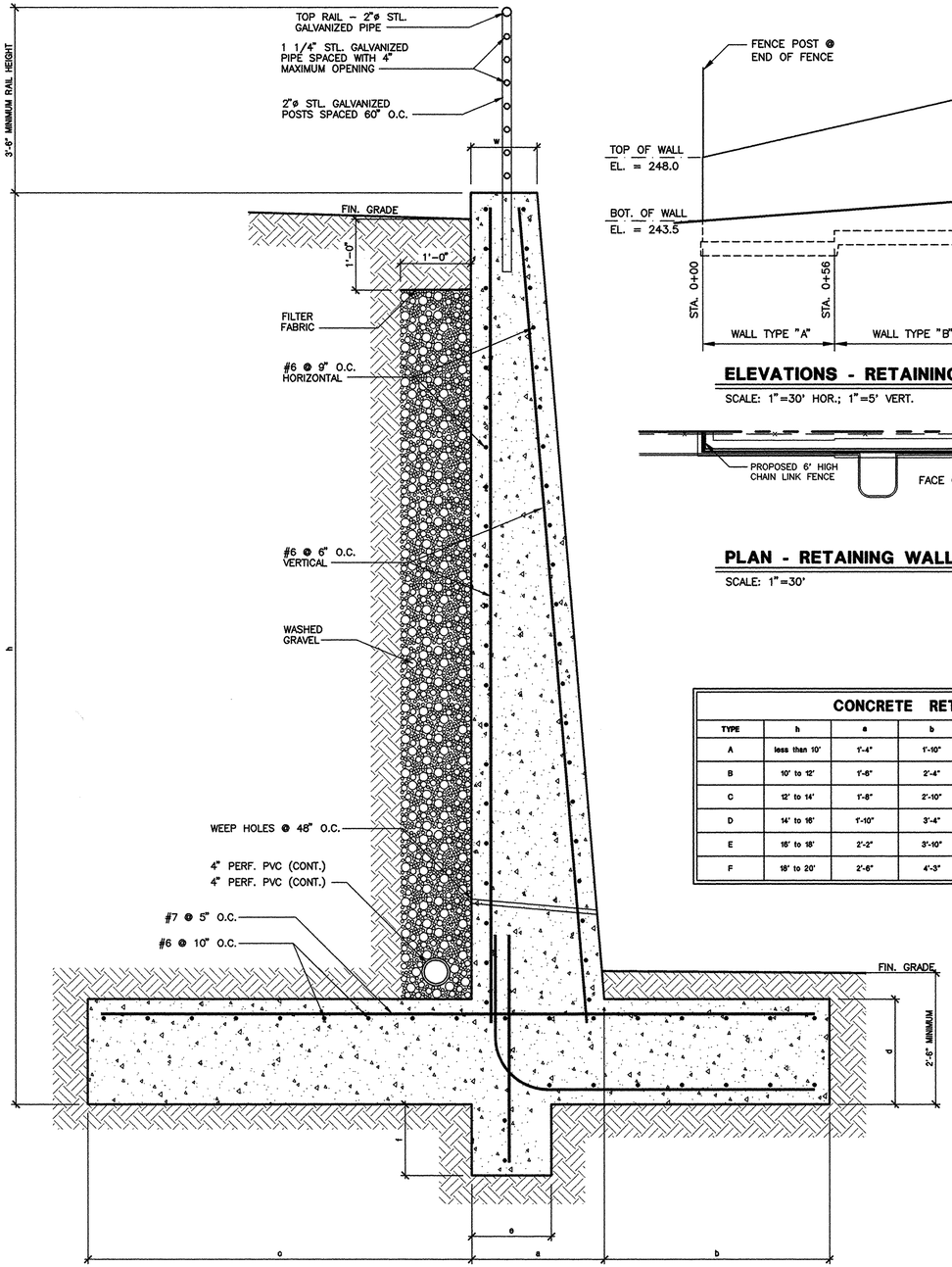
GUILFORD ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND
CENSUS TRACT 6069.02, TAX MAP 47, BLOCK 22/23
WATER CODE C04, SEWER CODE 7220000

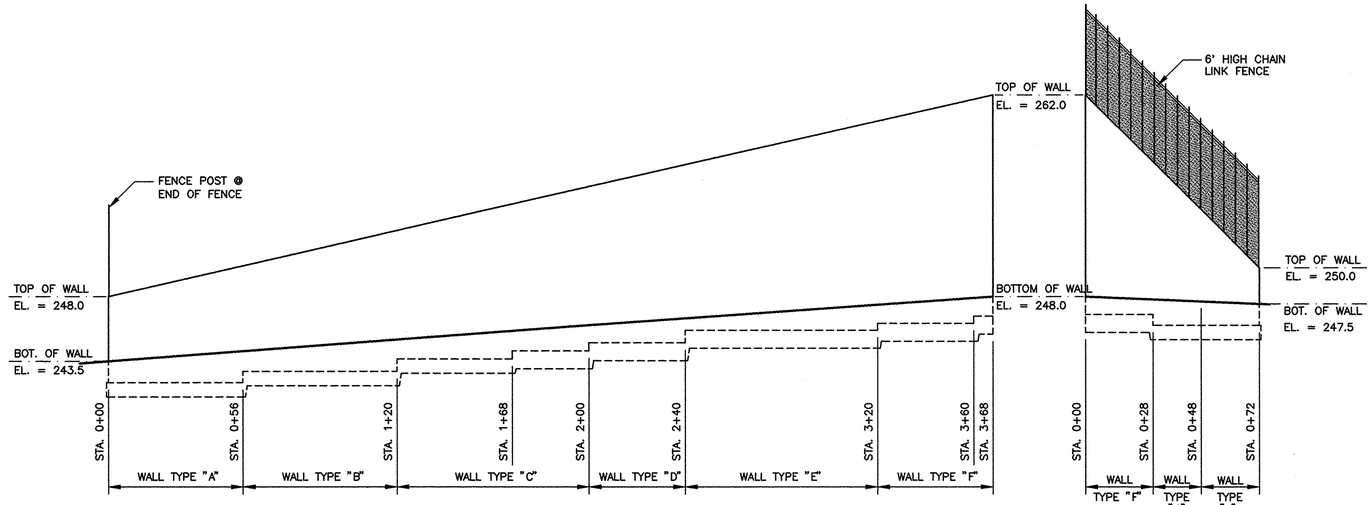
SCALE:	1"=50'
REVISIONS:	07-13-98 06-18-98
DATE:	12-18-97
JOB NUMBER:	
SHEET	SDP-1 2 OF 13

SDP-98-135



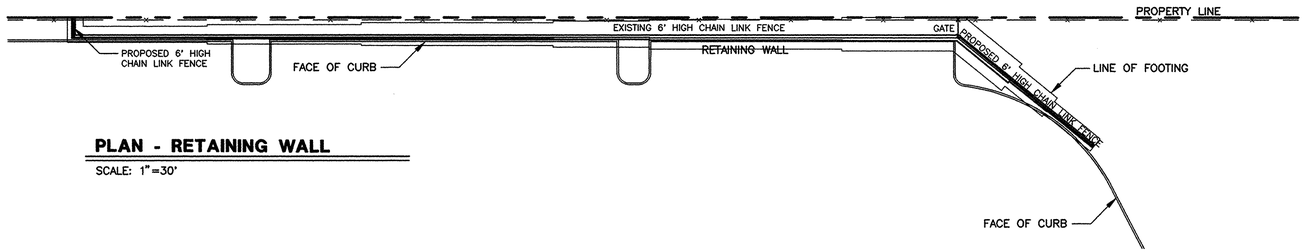
RETAINING WALL DETAIL

NO SCALE



ELEVATIONS - RETAINING WALL

SCALE: 1"=30' HOR.; 1"=5' VERT.



PLAN - RETAINING WALL

SCALE: 1"=30'

CONCRETE RETANING WALL DIMENSIONS								
TYPE	h	a	b	c	d	e	f	w
A	less than 10'	1'-4"	1'-10"	3'-6"	1'-2"	1'-0"	1'-0"	1'-0"
B	10' to 12'	1'-8"	2'-4"	4'-3"	1'-4"	1'-0"	1'-0"	1'-0"
C	12' to 14'	1'-8"	2'-10"	5'-0"	1'-6"	1'-3"	1'-0"	1'-0"
D	14' to 16'	1'-10"	3'-4"	5'-9"	1'-8"	1'-3"	1'-0"	1'-0"
E	16' to 18'	2'-2"	3'-10"	6'-6"	1'-10"	1'-3"	1'-0"	1'-3"
F	18' to 20'	2'-6"	4'-3"	7'-3"	2'-0"	1'-3"	1'-0"	1'-3"

STRUCTURAL NOTES

SOIL PRESSURE: SOIL BEARING CAPACITY BENEATH FOOTINGS TO BE A MINIMUM OF 3,000 PSF.

FOOTINGS: TO BE A MINIMUM OF 2'-6" BELOW OUTSIDE FINISH GRADE AND BEARING ON UNDISTURBED SOIL.

CONCRETE: MINIMUM Fc' = 5,000 PSI; DESIGN, MIX AND PLACE IN ACCORDANCE WITH ACI 318-83. CONCRETE SHALL BE PROTECTED SO THAT THE TEMPERATURE AT THE SURFACE WILL NOT FALL BELOW 50 DEGREES F, OR THAT THERE WILL BE NO LOSS OF MOISTURE FROM THE SURFACE FOR A PERIOD OF SEVEN DAYS AFTER POURING. PROTECTION AGAINST LOSS OF MOISTURE SHALL BE ACCOMPLISHED BY COVERING THE CONCRETE WITH BURLAP OR COTTON MATS KEPT CONTINUOUSLY WET. DUSTING THE SURFACE WITH CEMENT IS PROHIBITED. AFTER SCREEDING THE SLAB, THE SURFACE SHALL BE FLOATED AND LATER STEEL TROWELED TO A SMOOTH, HARD, LEVEL FINISH. ALL CONCRETE SLABS SHALL BE A MAXIMUM OF 3/16" OUT OF LEVEL IN ANY 10'-0" LENGTH. CHAMFER ALL EXPOSED EDGES. USE OF ADDITIVES SHALL NOT BE PERMITTED UNLESS SPECIFICALLY APPROVED BY I.P.D.S. USE OF ADDITIVES CONTAINING CALCIUM CHLORIDE SHALL NOT BE PERMITTED.

REINFORCING: ASTM A-615 GRADE 40.

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTIONWILL BE DONE IN ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. ~~I/WE WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~ I/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

JOSEPH NAZARIO, OWNER
NAZARIO DEVELPMENT AND COMPANY — DATE 5-1-98

BY THE ENGINEER:

I/WE CERTIFY THAT THIS PLAN FOR ~~POND CONSTRUCTION,~~ SOIL EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. ~~I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~

FRED L. SKELTON - MD. REGISTRATION No. 9070
IPDS, LLC — DATE 6/5/98

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE — DATE 9/3/98

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — DATE 9/3/98

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 10/6/98

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 10/5/98

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10/1/98

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

~~DIRECTOR~~ — DATE

~~CHIEF, BUREAU OF ENGINEERING~~ — DATE

AS BUILT CERTIFICATE

FRED L. SKELTON - MD. REGISTRATION No. 9070
IPDS, LLC — DATE

OWNER \ DEVELOPER

Joseph Nazario
Nazario Development and Company
6500 Ammendale Road
Beltsville, Maryland 20705
(301) 937-4664

STATE OF MARYLAND — FRED L. SKELTON — No. 9070 — REGISTERED PROFESSIONAL ENGINEER

SDP-98-135

IPDS
The Interprofessional PLANNING & DESIGN STUDIO, LLC
Engineers • Architects • Surveyors
Planners & Landscape Architects
802 Sligo Avenue
Silver Spring, Maryland, 20910
(301) 585-5676

SITE DETAILS

U.S. No.1 JOINT VENTURE
PARCEL "A", PLAT CMP No. 3592, WAREHOUSE
GUILFORD ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND
CENSUS TRACT 6069.02, TAX MAP 47, BLOCK 22/23
WATER CODE C04, SEWER CODE 7220000

SCALE: AS NOTED

REVISIONS: 06-18-98

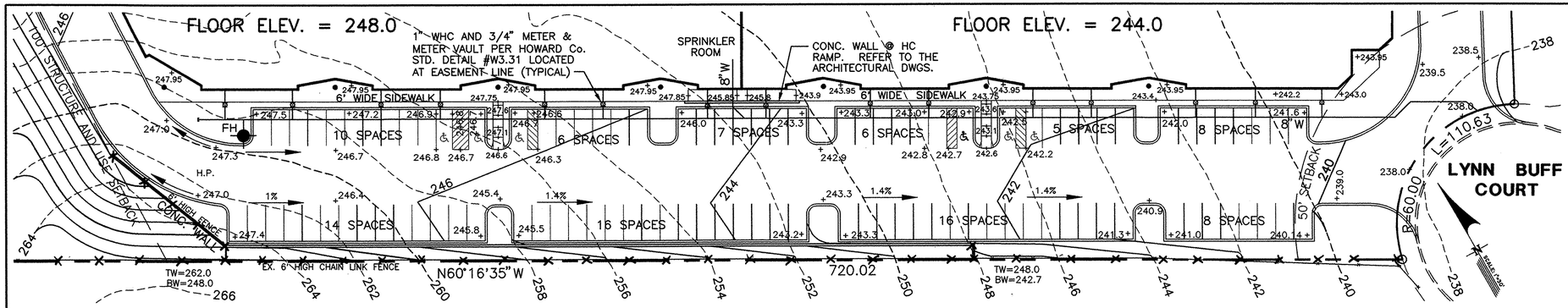
DATE: 01-18-98

JOB NUMBER:

SHEET 3 OF 13

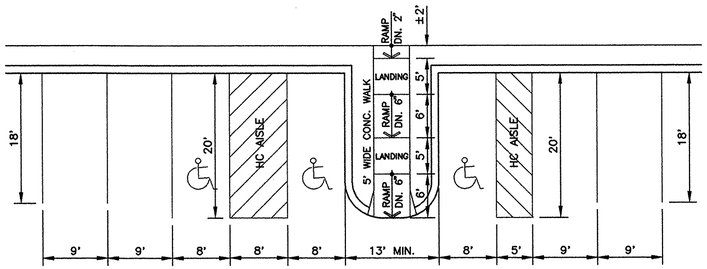
SDP-2

SDP-98-135



PARTIAL SITE PLAN

SCALE: 1"=30'



TYPICAL HANDICAPPED PARKING DETAIL

SCALE: 1"=10'

NOTE: HANDICAPPED SIGNS ARE BUILDING MOUNTED 6.5' ABOVE CONC. WALKWAY.

HANDICAPPED PARKING SIGN SPECIFICATIONS

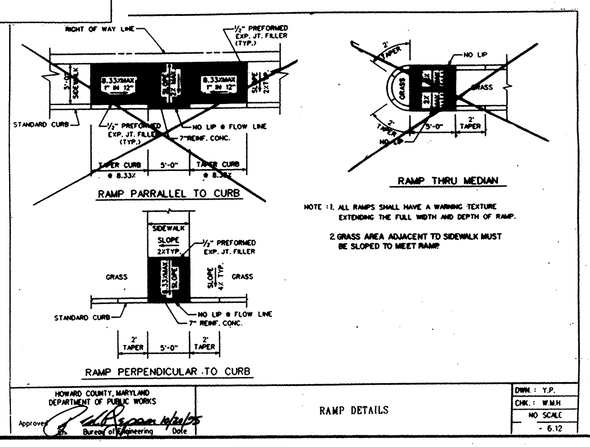
I. Fine Sign:

Pursuant to Howard County Council Bill #45-93* which established a $98.00 fine for violating provisions for handicapped parking and provided for posting notifications of that fine, this specification describes the sign authorized for posting and the associated mounting detail.

Sign to utilize an aluminum blank 6" x 12" x 0.080 inch thick with two (2) single post mounting holes. The text and border shall be standard green to match the R7-8 reserved parking sign and the background shall be reflective white. The text shall be 3" characters.

II. Mounting:

The above fine sign shall be mounted underneath the below R7-8 reserved parking sign. The bottom edge shall be no less than 7 feet above ground. If the sign is placed against a building, structure or other location where vehicle or pedestrian traffic is not obstructed, the bottom edge of the sign shall be at least 6 feet, but no more than 10 feet above ground. Because this is in addition to existing sign installations, some adjustment in height will be necessary.



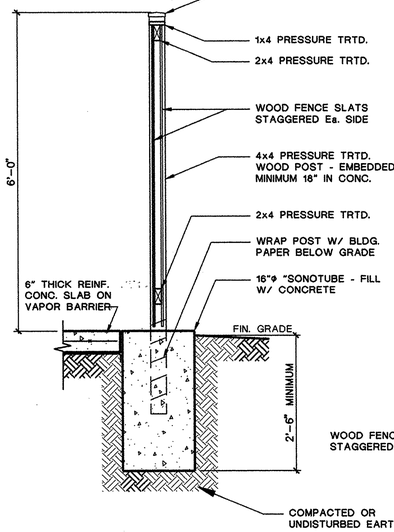
NOTE: 1. ALL RAMPS SHALL HAVE A WARNING TEXTURE EXTENDING THE FULL WIDTH AND DEPTH OF RAMP.

2. GRASS AREA ADJACENT TO SIDEWALK MUST BE SLOPED TO MEET RAMP.

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved: Bureau of Engineering — Date

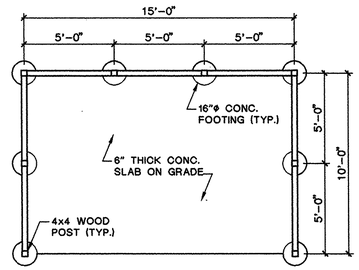
RAMP DETAILS

DWN.: Y.P.
CHK.: W.M.H.
NO SCALE
- 6.12



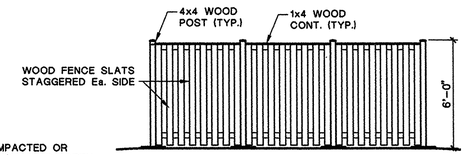
TYPICAL POST DETAIL

SCALE: 3/4"=1'-0"



PLAN

SCALE: 1/4"=1'-0"



ELEVATION

SCALE: 1/4"=1'-0"

DUMPSTER ENCLOSURE

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTIONWILL BE DONE IN ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. ~~I/WE WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~ I/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

JOSEPH NAZARIO / OWNER
NAZARIO DEVELPMENT AND COMPANY — DATE 5-1-98

BY THE ENGINEER:

I/WE CERTIFY THAT THIS PLAN FOR ~~POND CONSTRUCTION~~, SOIL EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. ~~I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~

FRED L. SKELTON - MD. REGISTRATION No. 9070
IPDS, LLC — DATE 6/5/98

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE — DATE 9/30/98

THESE PLANS SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — DATE 9/30/98

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 10/6/98

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 10/6/98

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10/6/98

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

N/A

DIRECTOR — DATE

CHIEF, BUREAU OF ENGINEERING — DATE

AS BUILT CERTIFICATE

FRED L. SKELTON - MD. REGISTRATION No. 9070
IPDS, LLC — DATE

OWNER \ DEVELOPER

Joseph Nazario
Nazario Development and Company
6500 Ammendale Road
Beltsville, Maryland 20705
(301) 937-4664

STATE OF MARYLAND — FRED LEO SKELTON — No. 9070 — PROFESSIONAL ENGINEER

SDP-98-135

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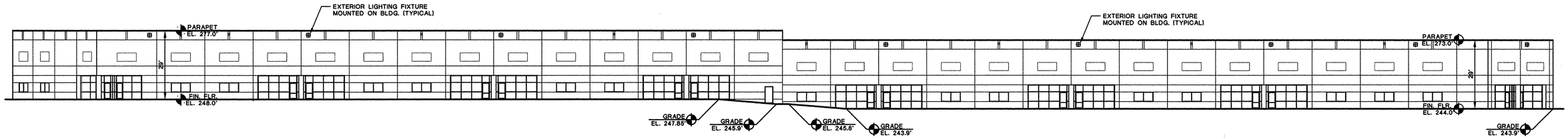
CENSUS TRACT 6069.02, TAX MAP 47, BLOCK 22/23
WATER CODE C04, SEWER CODE 7220000

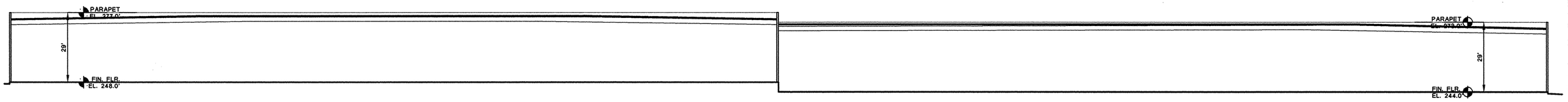
AS NOTED — SCALE:
06-18-98 — REVISIONS:
04-30-98 — DATE:
JOB NUMBER:
SDP-3
SHEET 4 OF 13

SDP-98-135



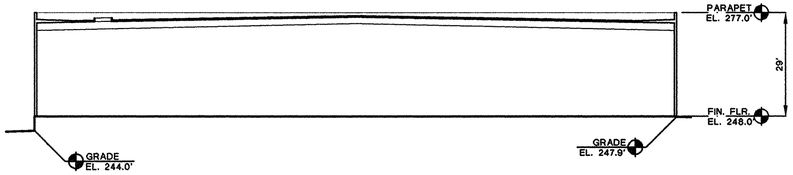
FRONT BUILDING ELEVATION

SCALE: 1"=20'



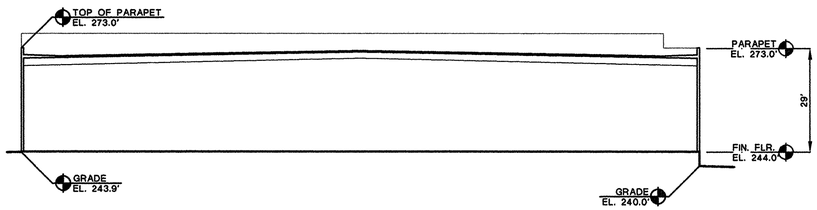
BUILDING SECTION "A"

SCALE: 1"=20'



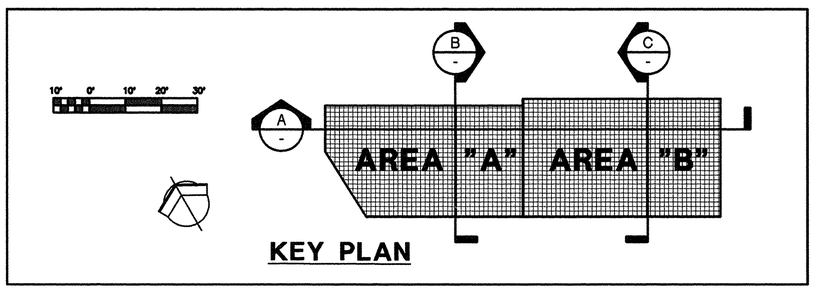
BUILDING SECTION "B"

SCALE: 1"=20'



BUILDING SECTION "C"

SCALE: 1"=20'



KEY PLAN

OWNER \ DEVELOPER

Joseph Nazario
Nazario Development and Company
6500 Ammendale Road
Beltsville, Maryland 20705
(301) 937-4664

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTIONWILL BE DONE IN ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. ~~I/WE WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~ I/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

JOSEPH NAZARIO, OWNER
NAZARIO DEVELPMENT AND COMPANY — DATE 5-1-98

BY THE ENGINEER:

I/WE CERTIFY THAT THIS PLAN FOR ~~POND CONSTRUCTION~~, SOIL EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. ~~I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~

FRED L. SKELTON - MD. REGISTRATION No. 9070
IPDS, LLC — DATE 6/5/98

THESE PLANS SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

NATURAL RESOURCES CONSERVATION SERVICE — DATE 9/30/98

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

HOWARD SOIL CONSERVATION DISTRICT — DATE 9/30/98

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 10/6/98

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 10/5/98

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10/1/98

FRED LEE SKELTON No. 9070 REGISTERED PROFESSIONAL ENGINEER STATE OF MARYLAND

SDP-98-135

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FRONT BUILDING ELEVATION & BUILDING PROFILES

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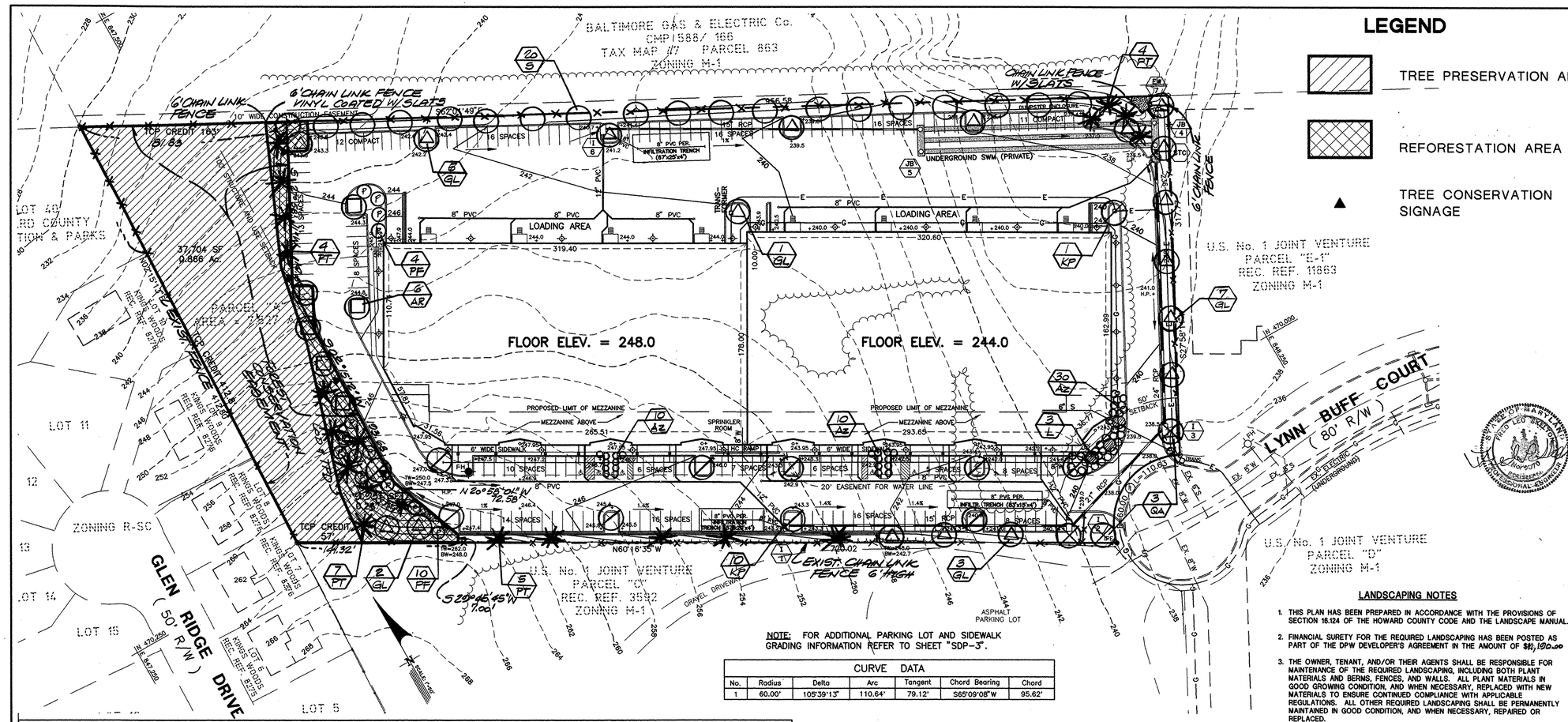
GUILFORD ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND
CENSUS TRACT 6069.02, TAX MAP 47, BLOCK 22/23
WATER CODE C04, SEWER CODE 7220000

SCALE: 1"=20'
DATE: 06-18-98
REVISIONS: 04-30-98
JOB NUMBER:

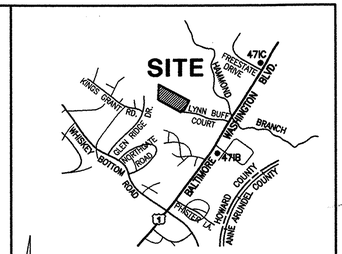
SDP-4
SHEET 5 OF 13

SDP-98-135



LEGEND

- TREE PRESERVATION AREA
- REFORESTATION AREA
- ▲ TREE CONSERVATION SIGNAGE



VICINITY MAP

SCALE: 1"=2000'
HOWARD Co. MAP PAGE 20; GRID B-10

NOTE: FOR ADDITIONAL PARKING LOT AND SIDEWALK GRADING INFORMATION REFER TO SHEET "SDP-3".

CURVE DATA

No.	Radius	Delta	Arc	Tangent	Chord Bearing	Chord
1	60.00'	105°39'13"	110.64'	79.12'	S65°09'08"W	95.62'

PLANTING SCHEDULE

CATEGORY	SYMBOL		BOTANICAL NAME	COMMON NAME	TYPE	SIZE	QUANTITIES: STREET TREES	QUANTITIES: ON-SITE (PARKING LOT)	QUANTITIES: BUFFERS & SCREENING	COST IN $: MATERIALS	COST IN $: INSTALLATION	COST IN $: TOTAL COST
SHADE TREES	⊕	AR	ACER RUBRUM	RED MAPLE	C	2½ - 3" CAL. B&B			6			
	△	GL	GLEDITSIA TRIACANTHOS INERMIS	HONEYLOCUST	C	2½ - 3" CAL. B&B		6	12			
	⊗	QA	QUERCUS ACUTISSIMA	SAWTOOTH OAK	C	2½ - 3" CAL. B&B	3					
	○	S	SOPHORA JAPONICA	REGENT SCHOLARTREE	C	2½ - 3" CAL. B&B			20			
ORNAMENTALS AND EVERGREENS	⊘	KP	KOELREUTRIA PANICULATA	GOLDEN RAIN TREE	O	6 - 8' B&B		11				
	Ⓟ	PF	PHOTINIA FRASERI	RED PHOTINIA	O	6 - 8' B&B			14			
	✱	PT	PINUS THUNBERGII	JAPANESE BLACK PINE	E	6 - 8' B&B			20			
SHRUBS	○	AZ	AZALEA KURUME	AZALEA	S	18 - 24" CON.	30	20				
	●	L	LEUCOTHOE CATESBAEI	DROOPING LEUCOTHOE	S	18 - 24" CON.	3					

C : CANAPE TREE
O : ORNAMENTAL
E : EVERGREEN
S : SHRUB

PERIMETER LANDSCAPE EDGE - SCHEDULE "A"

CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES: NORTH		EAST	SOUTH	WEST
		C (DUMPSTER)	C (PERIMETER)	A	A	C
LANDSCAPE TYPE	E					
LINEAR FEET OF ROADWAY FRONTAGE / PERIMETER	110'	15'	958.58'	317.77'	720.02'	412.80'
CREDIT OF EXISTING VEGETATION	NONE	NONE	163'	NONE	67'	412.80'
CREDIT FOR WALL, FENCE W/SLATS OR BERM	NONE	YES	YES	NONE	NONE	NONE
NUMBER OF PLANTS REQUIRED				OPTIONAL	OPTIONAL	EXIST. TREES PRESERVED
SHADE TREES	110/40x3	15/40x1	793.58/40x20	0	0	0
EVERGREEN TREES	0	15/20x1	0	0	0	0
SHRUBS	110/4x28	0	0	0	0	0
NUMBER OF PLANTS PROVIDED						
SHADE TREES	3	1	20	0	0	0
EVERGREEN TREES	0	1	40	0	0	0
OTHER TREES (2:1 SUB.)	0	0	0	0	0	0
SHRUBS	33	0	0	0	0	0

SCHEDULE "B" PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES	193 SPACES
NUMBER OF TREES REQUIRED (1 PER 20 SPACES)	193 ÷ 20 = 10
NUMBER OF TREES PROVIDED: SHADE TREES	17
NUMBER OF TREES PROVIDED: OTHER TREES (2:1 SUBSTITUTION)	
NUMBER OF PLANTING ISLANDS: REQUIRED	10
NUMBER OF PLANTING ISLANDS: PROVIDED	10
LANDSCAPE ISLAND AREA PROVIDED	2,400 SF

OWNER \ DEVELOPER

Joseph Nazario
Nazario Development and Company
6500 Ammendale Road
Beltsville, Maryland 20705
(301) 937-4664

DEVELOPER'S/BUILDER'S CERTIFICATE

WE CERTIFY THAT THE LANSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. WE FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

JOSEPH NAZARIO / OWNER
NAZARIO DEVELPMENT AND COMPANY — DATE 2-6-98

FRED L. SKELTON - MD. REGISTRATION No. 9070
IPDS, LLC — DATE 05-01-98

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 10/6/98

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 10/5/98

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10/1/98

LANDSCAPING NOTES

1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
2. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT IN THE AMOUNT OF $11,190.00
3. THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES, AND WALLS. ALL PLANT MATERIALS IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.

AS BUILT CERTIFICATE

FRED L. SKELTON - MD. REGISTRATION No. 9070
IPDS, LLC — DATE

Woodland Conservation Worksheet for Non-Governmental Projects

Zone: M-1
Gross Tract: 7.527 Ac.
Floodplain–
Previously Dedicated Land–
Net Tract: 7.527 Ac.
Subdivision/Block/Lot: U.S. No. 1 Joint Venture - Parcel "A"

Owner: Joseph Nazario, Nazario Dev. & Co.
Address: 6500 Ammendale Road, Beltsville, Maryland 20705
Phone: (301) 937-4664
Tax map/Grid/parcel: 47, B1, 22/23
Permit #:

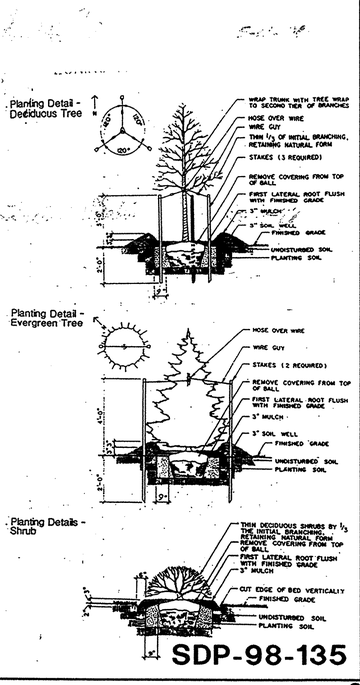
Woodland Conservation Calculations:

	Net Tract (acres)	Floodplain (acres)
Existing Woodland	a. 6.78	k. N/A
WCT (15 % x Net tract)	b. 1.13	
Smaller of a. or b.	c. 1.13	
Woodland above WCT (a-b); if <0 enter 0	d. 5.65	
Woodland Cleared	e. 5.91	l.
Smaller of d. or e.	f. 5.65	
Clearing below WCT (e-f); if <0 enter 0	g. 0.26	
Replacement (f x 0.25)	h. 1.41	
Afforestation: (g x 2.0)	i. 0.52	
(net tract x .2 – a), or (net tract x .15 – a) if <0 enter 0	j. 0.00	
Replacement required = (c+h+i+j+l-g) =	m. 2.80	

Woodland Conservation Provided:	(acres)
Woodland Preservation	0.87
Reforestation/Replacement	0.25
Afforestation	
Area approved for fee-in-lieu	1.68 x $0.30 x 43560 = $21,254.24
Off-site Credits	
Woodland Conservation Provided (must equal or exceed item "m" above)	2.80

Additional woodland retained but not part of any requirements: _____ acres

Tree Conservation Plan Certified By:
Name: Siegfried W. Teichler
Address: 802 Sligo Avenue, Silver Spring, MD 20910
Lincense: RLA #230



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LANDSCAPING PLAN AND TREE CONSERVATION PLAN

U.S. No.1 JOINT VENTURE

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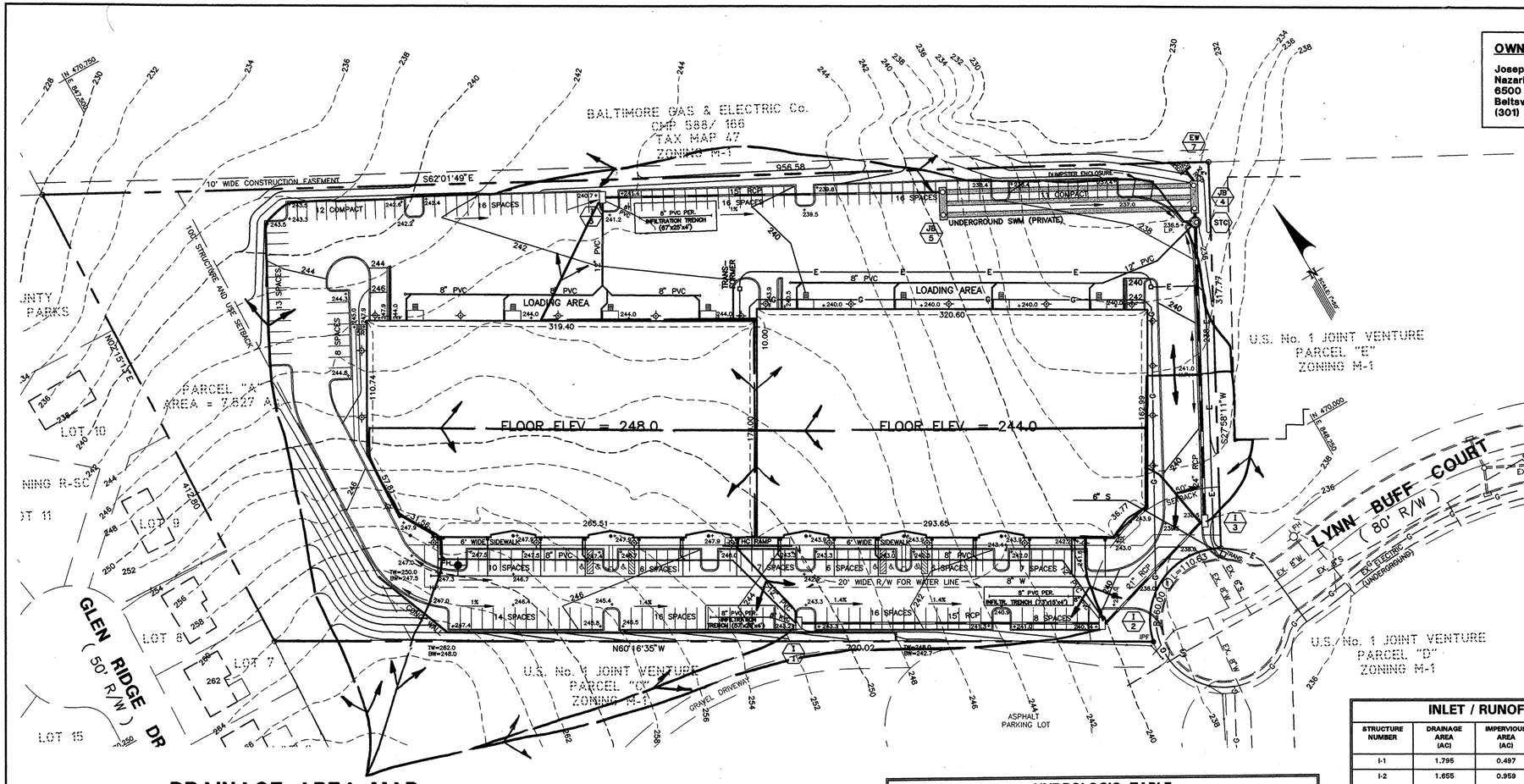
SHEET 6 OF 13

SDP-98-135

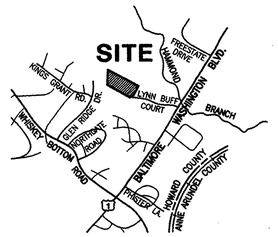


DRAINAGE AREA MAP

SCALE: 1"=50'

OWNER \ DEVELOPER

Joseph Nazario
Nazario Development and Company
6500 Ammendale Road
Beltsville, Maryland 20705
(301) 937-4664



VICINITY MAP

SCALE: 1"=2000'
HOWARD Co. MAP PAGE 20; GRID B-10

LEGEND

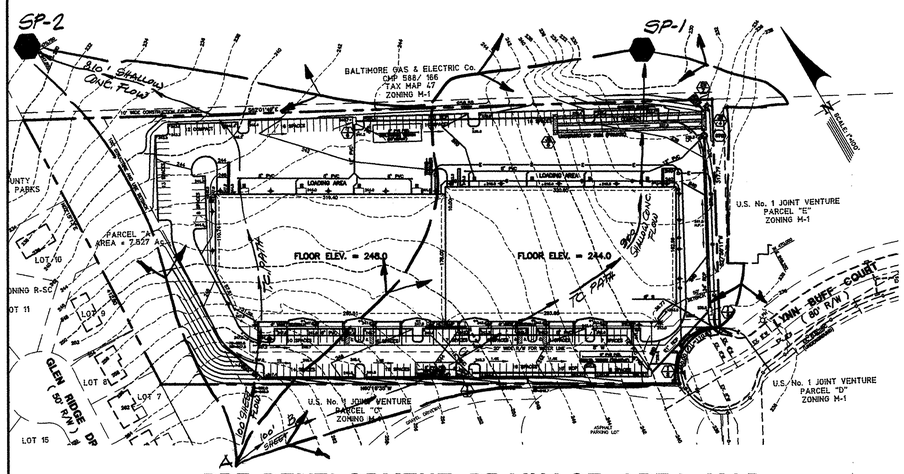
DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE		
TREELINE		
CONTOUR LINE	250	250
SPOT ELEVATION	X 250	+ 250
STORMDRAIN PIPE		
LIMIT OF DISTURBANCE		L.O.D.
HANDICAPPED SPACE		
FIRE HYDRANT	FH	FH
CURB & GUTTER		
WHEELCHAIR RAMP		
TOP OF WALL		T.W.
BOTTOM OF WALL		B.W.
DRAINAGE DIVIDE		
STUDY POINT		S.P.
TIME OF CONCENTRATION PATH (T.C. PATH)		

INLET / RUNOFF TABLE

STRUCTURE NUMBER	DRAINAGE AREA (AC)	IMPERVIOUS AREA (AC)	PERVIOUS AREA (AC)	TIME OF CONCENTRATION
I-1	1.795	0.497	0.798	17.2 min.
I-2	1.655	0.959	0.696	10.12 min.
I-3	0.108	0.079	0.029	5 min.
STC/JB-4	1.939	1.246	0.009	5 min.
JB-5				
I-6	1.737	1.473	0.264	19.62 min.
EW-7				

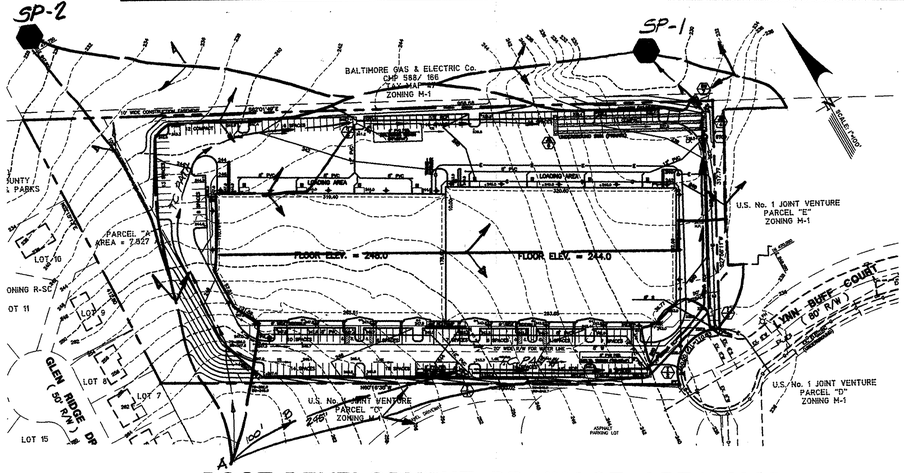
HYDROLOGIC TABLE

STUDY POINT	DRAINAGE AREA (ACRES)		CURVE NUMBER		TIME OF CONCENTRATION	
	PRE-DEVELOPED	POST-DEVELOPED	PRE-DEVELOPED	POST-DEVELOPED	PRE-DEVELOPED	POST-DEVELOPED
1	6.087	9.21	61	80	0.320	0.314
2	3.98	0.742	55	55	0.3125	0.216



PRE-DEVELOPMENT DRAINAGE AREA MAP

SCALE: 1"=100'



POST-DEVELOPMENT DRAINAGE AREA MAP

SCALE: 1"=100'

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTIONWILL BE DONE IN ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. ~~I/WE WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~ I/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

JOSEPH NAZARIO - OWNER
NAZARIO DEVELPMENT AND COMPANY — DATE 05-01-98

BY THE ENGINEER:

I/WE CERTIFY THAT THIS PLAN FOR ~~POND CONSTRUCTION~~, SOIL EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. ~~I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~

FRED L. SKELTON - MD. REGISTRATION No. 9070
IPDS, LLC — DATE 05-01-98

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

NATURAL RESOURCES CONSERVATION SERVICE — DATE 9/30/98

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

HOWARD SOIL CONSERVATION DISTRICT — DATE 9/30/98

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 10/5/98

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 10/5/98

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10/1/98

STATE OF MARYLAND
FRED LEO SKELTON
No. 9070
PROFESSIONAL ENGINEER

IPDS
The Interprofessional PLANNING & DESIGN STUDIO, LLC
Engineers • Architects • Surveyors
Planners & Landscape Architects
802 Sligo Avenue
Silver Spring, Maryland, 20910
(301) 585-5676

DRAINAGE AREA MAPS

U.S. No.1 JOINT VENTURE
PARCEL "A", PLAT CMP No. 3592, WAREHOUSE
GUILFORD ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND
CENSUS TRACT 6069.02, TAX MAP 47, BLOCK 22/23
WATER CODE C04, SEWER CODE 7220000

SCALE: AS NOTED

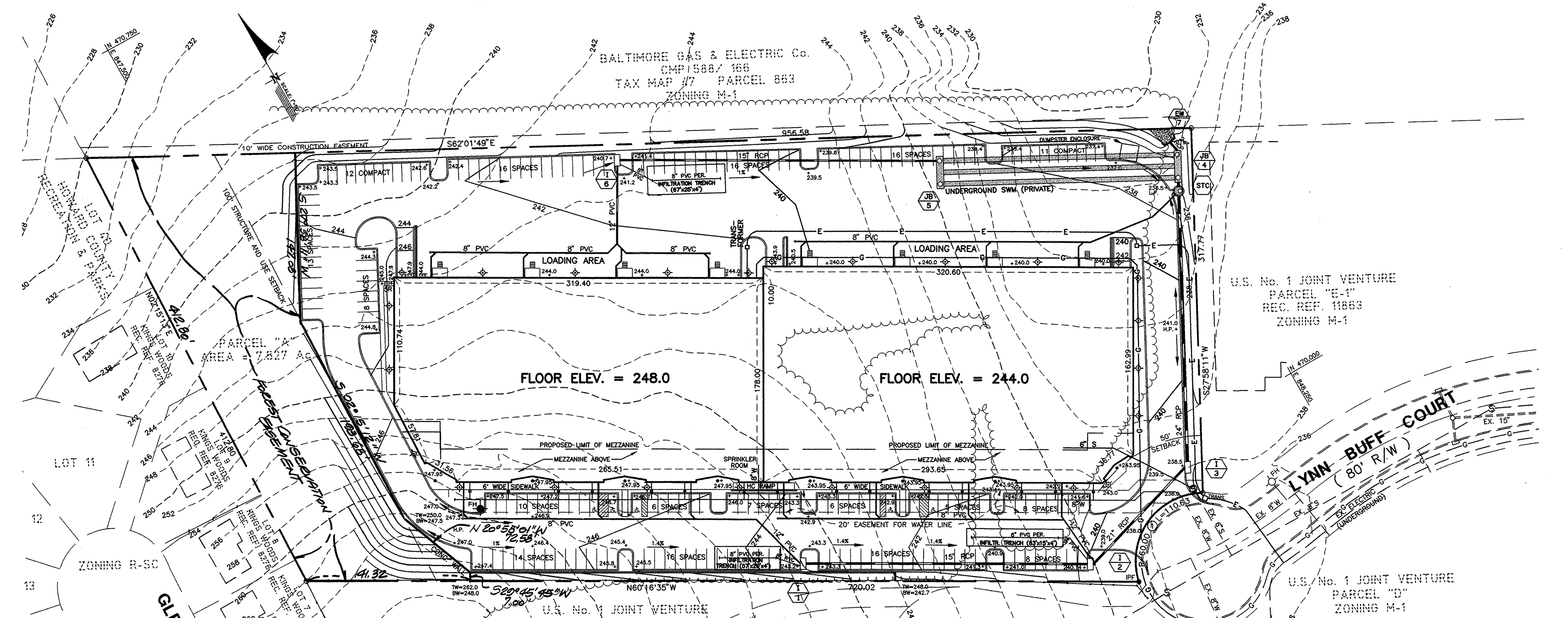
REVISIONS:
04-30-98
DATE:

JOB NUMBER:

DA-1

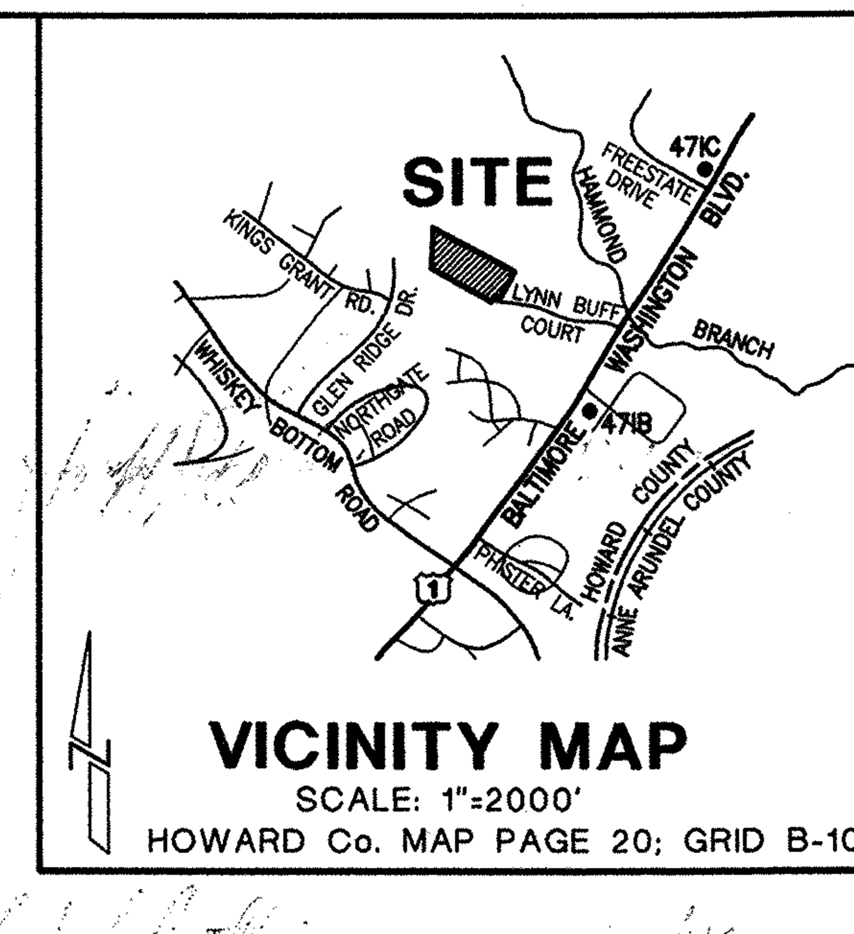
SHEET 7 OF 13

SDP-98-135



NOTE: FOR ADDITIONAL PARKING LOT AND SIDEWALK GRADING INFORMATION REFER TO SHEET "SDP-3".

CURVE DATA						
No.	Radius	Delta	Arc	Tangent	Chord Bearing	Chord
1	60.00'	105°39'13"	110.64'	79.12'	S65°09'08"W	95.62'



STRUCTURE SCHEDULE

NO.	TYPE	WIDTH DIAM.	TOP ELEV.	INV. ELEV.	STANDARD DETAIL
1	INLET A-5	6' x 5'	243.70	236.83	SD 4.01
2	INLET A-5	5' x 5'	240.54	232.78	SD 4.01
3	INLET A-10	2.5' x 10'	238.50	235.00	SD 4.02
4	JUNCTION BOX A-5	6' x 5'	237.50	231.00	SEE DETAIL
5	JUNCTION BOX		238.90	232.00	SEE DETAIL
6	INLET A-5	5' x 5'	241.20	234.93	SD 4.01
7	ENDWALL TYPE "C"	24"	234.20	230.70	SD 5.21
STC	STORMCEPTOR	96" DIA.	237.50	226.00	STC 2400

PIPE SCHEDULE

FROM	TO	SIZE	TYPE	LENGTH (FEET)
1	2	15" RCP	CL. IV	244
2	3	21" RCP	CL. IV	116
3	STC	24" RCP	CL. IV	230
STC	4	24" RCP	CL. IV	4
4	7	24" RCP	CL. III	11
5	6	15" RCP	CL. IV	272
6	4	TRIPLE 48"	CMP	600

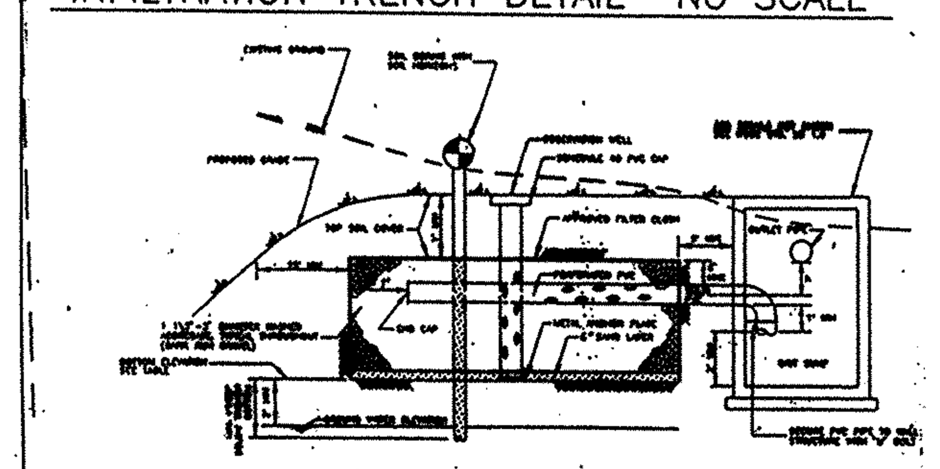
PIPE SUMMARY

SIZE	TYPE	LENGTH
15"	RCP CL IV	516
21"	RCP CL IV	116
24"	RCP CL III	11
24"	RCP CL IV	234
48"	CMP	600

OPERATION AND MAINTENANCE SCHEDULE FOR UNDERGROUND SWM QUANTITY STORAGE PIPES AND INFILTRATION TRENCH INLET STRUCTURE

1. THE INFILTRATION TRENCH INLET STRUCTURES AND THE 48" DIA. UNDERGROUND STORMWATER STORAGE PIPES SHALL BE INSPECTED AND CLEANED EVERY SIX MONTHS TO MAINTAIN OPERATION AND FUNCTION. THE OWNER SHALL INSPECT THE INFILTRATION TRENCH INLET STRUCTURES, STORMCEPTOR AND UNDERGROUND STORAGE PIPES EVERY SIX MONTHS AT A MINIMUM AND AFTER ESPECIALLY SEVERE STOMS. WHEN SEDIMENT ACCUMULATION OF MORE THAN 2" OR ANY DEBRIS THAT MIGHT OBSTRUCT THE OPENING IS OBSERVED , THE FACILITY MUST BE CLEANED.
2. THE FACILITY SHALL BE CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTACT APPROPRIATE REGULATORY AGENCIES.
3. THE MAINTENANCE OF THE INFILTRATION TRENCH INLETS AND STORMCEPTOR STRUCTURES SHALL BE DONE USING A VACUUM TRUCK WHICH WILL REMOVE THE WATER, SEDIMENT, DEBRIS, FLOATING HYDROCARBONS AND OTHER MATERIALS IN THE INLET. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.
4. THE SEDIMENT DEBRIS SHALL BE REMOVED FROM THE 48" DIA. STORAGE PIPES BY VACUUM TRUCK OR OTHER MANUAL MEANS.
5. THE UNDERGROUND STORAGE PIPES CONTROL STRUCTURE SHALL BE CHECKED FOR ANY OBSTRUCTION AT LEAST ONE EVERY SIX MONTHS. IF OBSTRUCTIONS ARE FOUND THE OWNER SHALL HAVE THEM REMOVED.
6. THE OWNER SHALL PROVIDE CORRECTIVE MAINTENANCE ANY TIME THE TRENCHES DO NOT DRAIN DOWN COMPLETELY WITHIN 96 HOURS.
7. THE OWNER SHALL RETAIN AND MAKE THE INSPECTION/MONITORING FORMS AVAILABLE TO THE HOWARD COUNTY OFFICIALS UPON THIER REQUEST.
8. THE SWM SYSTEM IS TO BE PRIVATELY OWNED AND MAINTAINED.

INFILTRATION TRENCH DETAIL NO SCALE



NOTE: REFER TO DER STD. 70.0 FOR DIMENSIONS NOT SHOWN.

NOTE: TRENCH SHALL BE FILLED WITH 1½" TO 3" WASHED BANK-RUN GRAVEL OR MD. #2 OR #3 WASHED CRUSHED BLUESTONE. BLUESTONE MUST BE OBTAINED FROM AN APPROVED SUPPLIER.

INFILTRATION TRENCH GENERAL NOTES AND SPECIFICATIONS

1. INFILTRATION SYSTEMS MAY NOT RECEIVE RUNOFF UNTIL THE ENTIRE CONTRIBUTORY DRAINAGE AREA TO THE INFILTRATION DRAINAGE AREA TO THE INFILTRATION SYSTEM HAS RECEIVED FINAL STABILIZATION.
2. HEAVY EQUIPMENT AND TRAFFIC SHALL BE RESTRICTED FROM TRAVELLING OVER INFILTRATION AREAS TO MINIMIZE COMPACTION OF THE SOIL.
3. EXCAVATE THE TRENCH TO THE DESIGN DIMENSIONS. EXCAVATED MATERIALS SHALL BE PLACED AWAY FROM THE TRENCH SIDES TO ENHANCE TRENCH WALL STABILITY. LARGE TREE ROOTS MUST BE TRIMMED FLUSH WITH THE TRENCH SIDES IN ORDER TO PREVENT FABRIC PUNCTURING OR TEARING OF THE FILTER CLOTH DURING SUBSEQUENT INSTALLATION PROCEDURES. THE SIDEWALLS OF THE TRENCH SHALL BE ROUGHENED WHERE SHEARED AND SEALED BY HEAVY EQUIPMENT.
4. A LIST OF NON-WOVEN FABRICS THAT MEET HOWARD COUNTY SPECIFICATIONS ARE AS FOLLOWS. ANY ALTERNATIVE FILTER FABRIC MUST BE APPROVED BY THE ENGINEER AND HOWARD COUNTY.
   - A. MIRAFI 140-N
   - B. SUPAC 4NP, 4-1/2 NP, 5NP, 8NP
   - C. TYPAR 341, 3401
   - D. EXXON GEOTEXTILES 1300
   - E. TERRATEX 5D
5. EACH ROLL MUST BE CUT TO THE PROPER WIDTH PRIOR TO INSTALLATION. THE CUT WIDTH MUST INCLUDE SUFFICIENT MATERIAL TO CONFORM TO TRENCH PERIMETER IRREGULARITIES AND FOR A 6 INCH MINIMUM TOP OVERLAP. THE FILTER FABRIC SHALL BE TUCKED UNDER THE SAND LAYER ON THE BOTTOM OF THE INFILTRATION TRENCH FOR A DISTANCE OF 5 TO 12 INCHES. STONES OR OTHER ANCHORING OBJECTS SHOULD BE PLACED ON THE FABRIC AT THE EDGE OF THE TRENCH TO KEEP THE TRENCH OPEN DURING WINDY PERIOD. WHEN OVERLAPS ARE REQUIRED BETWEEN ROLLS, THE UPSTREAM ROLL IN ORDER TO PROVIDE A SHINGLED EFFECT.
6. A 6 INCH SAND FILTER LAYER SHALL BE PLACED ON THE BOTTOM OF THE INFILTRATION TRENCH AND COMPACTED USING PLATE COMPACTORS, THE SAND FOR THE INFILTRATION TRENCH SHALL BE WASHED AND MEET AASHTO M43 STD. NO. 9 OR NO. 10. ANY ALTERNATIVE SAND GRADATION MUST BE APPROVED BY THE ENGINEER AND HOWARD COUNTY.
7. A MAXIMUM LOOSE LIFT THICKNESS OF 12 INCHES IS RECOMMENDED. THE GRAVEL FOR THE INFILTRATION TRENCH SHALL BE WASHED AND MEET ONE OF THE FOLLOWING AASHTO M43 STDS; NO. 2 OR 3. ANY ALTERNATIVE GRAVEL GRADATION MUST BE APPROVED BY THE ENGINEER AND HOWARD COUNTY. FOLLOWING THE STONE AGGREGATE PLACEMENT, THE FILTER FABRIC SHALL BE FOLDED OVER THE STONE AGGREGATE TO FORM A 6 INCH MINIMUM LONGITUDINAL LAP. THE DESIRED FILL SOIL OR STONE AGGREGATE SHALL BE PLACED OVER THE LAP AT SUFFICIENT INTERVALS TO MAINTAIN THE LAP DURING SUBSEQUENT BACKFILLING.
8. CARE SHALL BE EXERCISED TO PREVENT NATURAL OR FILL SOILS FROM INTERMIXING WITH THE STONE AGGREGATE. ALL CONTAMINATED STONE AGGREGATE SHALL BE REMOVED AND REPLACED WITH UNCONTAMINATED STONE AGGREGATE.
9. VOIDS CAN BE CREATED BETWEEN THE FABRIC AND EXCAVATED SIDES AND SHALL BE AVOIDED. REMOVING BOULDERS OR OTHER OBSTACLES FROM THE TRENCH WALLS IS ONE SOURCE OF SUCH VOIDS. NATURAL SOILS SHOULD BE PLACED IN THESES VOIDS AT THE MOST CONVENIENT TIME DURING CONSTRUCTION TO ENSURE FABRIC CONFORMITY TO THE EXCAVATION SIDES.
10. VERTICALLY EXCAVATED WALLS MAY BE DIFFICULT TO MAINTAIN IN AREAS WHERE THE SOIL MOISTURE IS HIGH OR WHERE SOFT COHESIVE OR COHESIONLESS SOILS PREDOMINATE. THESE CONDITIONS MAY REQUIRE LAYING BACK OF THE SIDE SLOPES TO MAINTAIN STABILITY.
11. PVC DISTRIBUTION PIPES SHALL BE SDR 35 AND MEET ASTM STD D 3034. PERFORATIONS SIZE AND SPACING SHALL MEET ASTM STD D 2729. PERFORATED PIPE SHALL BE PROVIDED ONLY WITHIN THE INFILTRATION TRENCH AND SHALL TERMINATE 1 FOOT SHORT OF THE INFILTRATION TRENCH WALL THE END OF THE PVC PIPE SHALL BE CAPPED.
12. THE OBSERVATION WELL IS TO CONSIST OF 4-INCH TO 6-INCH DIAMETER PVC PIPE WITH A CAP AT GROUND LEVEL AND IS TO BE LOCATED IN THE LONGITUDINAL CENTER OF THE INFILTRATION TRENCH. A PERFORATED PVC PIPE SHALL BE PROVIDED AND PLACED VERTICALLY WITHIN THE INFILTRATION TRENCH AN A CAP PROVIDED AT THE BOTTOM OF THE PIPE. THE BOTTOM OF THE PIPE SHALL REST ON THE TRENCH BOTTOM.

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTIONWILL BE DONE IN ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. ~~I/WE WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~ I/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

JOSEPH NAZARIO (OWNER) — 5-1-98 — DATE
NAZARIO DEVELPMENT AND COMPANY

BY THE ENGINEER:

I/WE CERTIFY THAT THIS PLAN FOR ~~POND CONSTRUCTION,~~ SOIL EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. ~~I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~

FRED L. SKELTON - MD. REGISTRATION No. 9070 — 6/5/98 — DATE
IPDS, LLC

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

NATURAL RESOURCES CONSERVATION SERVICE — 9/30/98 — DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

HOWARD SOIL CONSERVATION DISTRICT — 9/30/98 — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — 10/6/98 — DATE

CHIEF, DIVISION OF LAND DEVELOPMENT — 10/5/98 — DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — 10/1/98 — DATE

STATE OF MARYLAND — FRED LEO SKELTON — No. 9070 — REGISTERED PROFESSIONAL ENGINEER

OWNER \ DEVELOPER

Joseph Nazario
Nazario Development and Company
6500 Ammendale Road
Beltsville, Maryland 20705
(301) 937-4664

IPDS
The Interprofessional PLANNING & DESIGN STUDIO, LLC
Engineers • Architects • Surveyors
Planners & Landscape Architects
802 Sligo Avenue
Silver Spring, Maryland, 20910
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STORMWATER MANAGEMENT PLAN

U.S. No.1 JOINT VENTURE
PARCEL "A", PLAT CMP No. 3592, WAREHOUSE
GUILFORD ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND
CENSUS TRACT 6069.02, TAX MAP 47, BLOCK 22/23
WATER CODE C04, SEWER CODE 7220000

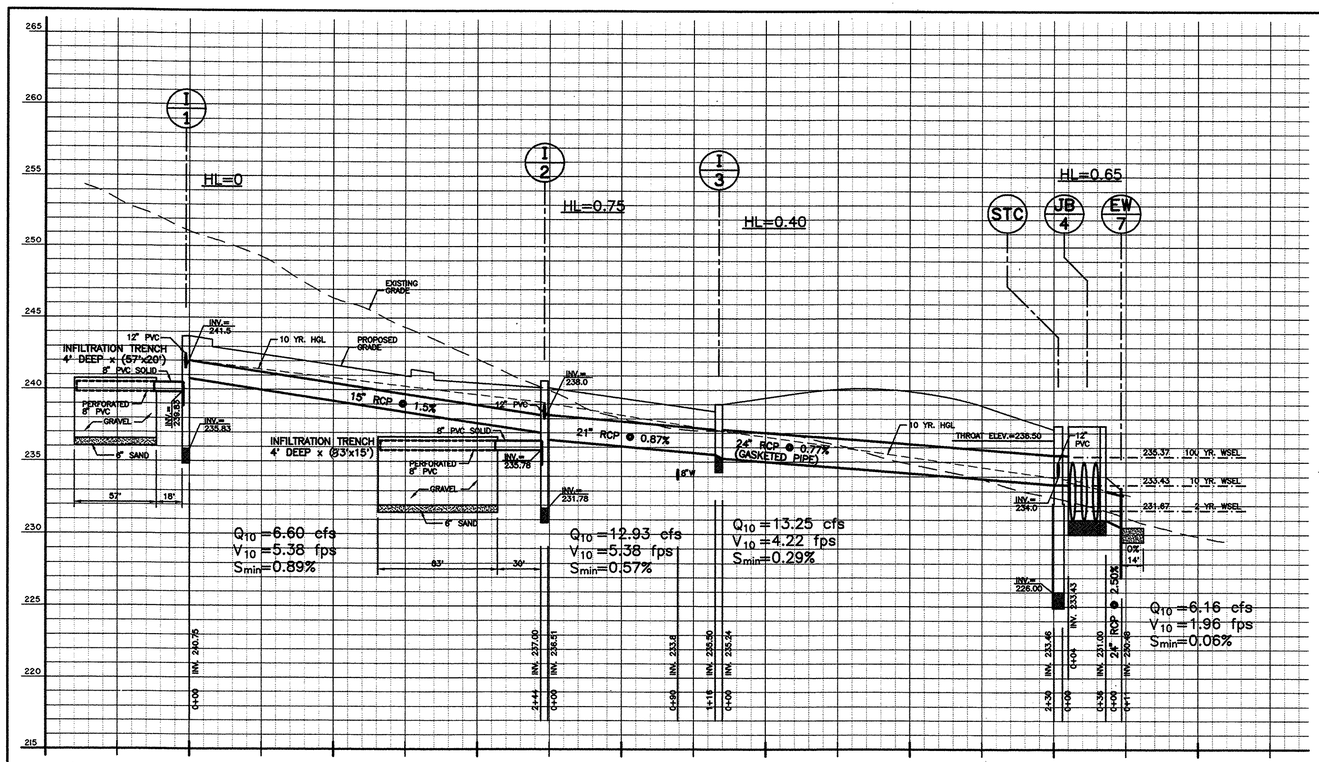
SCALE: 1"=50'
REVISIONS: 06-18-98
DATE: 01-28-98
JOB NUMBER:

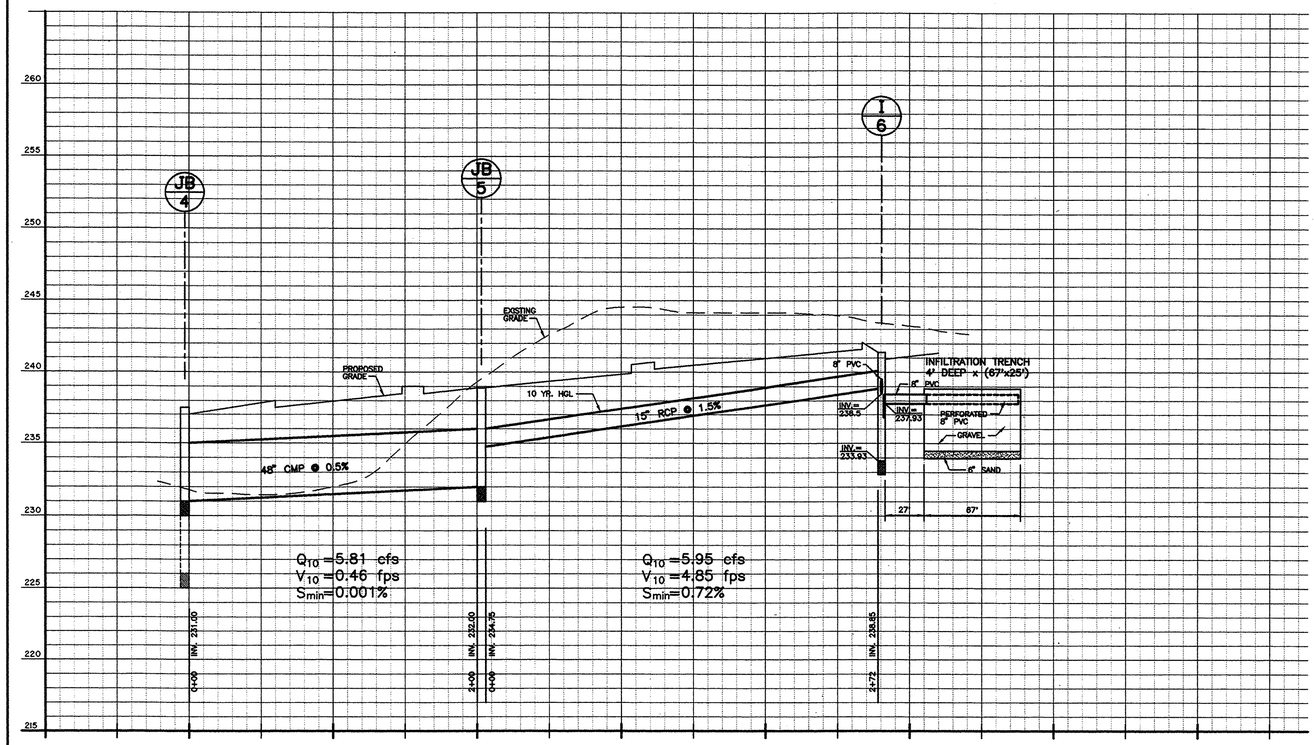
SWM-1

SHEET 8 OF 13

SDP-98-135

SDP-98-135





CONTRACTOR INSTALLATION INSTRUCTIONS:

PRECAST CONCRETE STORMCEPTOR

STAKEOUT-OUT THE LOCATION OF THE STORMCEPTOR AND EXCAVATE HOLE. EXCAVATE ADEQUATE SPACE TO CONNECT INLET AND OUTLET PIPES TO UNIT. INSTALL A 12' DEEP (OR AS REQUIRED) LAYER OF COMPACTED AGGREGATE SUBBASE AT THE BOTTOM OF THE EXCAVATION. INSTALL MULE OR SHORING AS NEEDED.

CHECK ELEVATION OF UNIT BY MEASURING ITS SECTIONS FROM BASE OF THE STORAGE CHAMBER (BOTTOM OF UNIT'S SLAB) TO THE INVERT OF STORMCEPTOR BYPASS CHAMBER INLET ELEVATION (FIBERGLASS INSERT). SUBTRACT THIS DISTANCE FROM DESIGN INVERT ELEVATION TO DETERMINE TOP OF SUBBASE ELEVATION. CHECK ELEVATION OF INSTALLED SUBBASE AND ADJUST AS NEEDED.

SECURE INSPECTOR APPROVAL OF SUBGRADE AND SUBBASE.

INSTALL STORAGE CHAMBER. INSTALL SCREW INSERTS INTO BASE OF STORAGE CHAMBER. ATTACH CABLES OF CHAINS TO ALL 3 LIFT LUGS ON THE BASE SLAB. USING LARGE EQUIPMENT OR CRANE LIFT AND PLACE THE BASE SECTION OF THE STORAGE CHAMBER IN THE EXCAVATED HOLE ON THE SUBBASE. MAKE SURE THAT THE ABASE IS LEVEL. SPECIFIC ALIGNMENT OF THIS PART IS NOT REQUIRED. INSTALL RUBBER GASKET ON BASE UNIT AND COAT WITH LUBRICATING GREASE (PROVIDED IN SHIPMENT), IF NOT PRELUBRICATED. INSTALL ADDITIONAL STORAGE CHAMBER SECTIONS, AS REQUIRED (PROCEDURE IS SAME AS STEP 8).

(FOR STORMCEPTOR MODELS STC-900, STC-1200 AND STC-1800 SKIP STEP 5 AND GO TO STEP 6)

INSTALL REDUCING SLAB. (STORMCEPTOR MODELS STC-2400, STC-3600, STC-4800, STC-6000 AND STC-7200) CHECK THAT SECTION IS SET FLUSH, LEVEL AND IS AT THE PROPER ELEVATION. INSTALL RUBBER GASKET ON THE TRANSITION SLAB SPIGOT AND COAT WITH LUBRICATING GREASE (PROVIDE IN SHIPMENT).

INSTALL BYPASS CHAMBER OF STORMCEPTOR WITH FACTORY INSTALLED STORMCEPTOR INSERT. LIFT BYPASS SECTION AND INSTALL, WHILE CHECKING ALIGNMENT AND GRADE OF INLET AND OUTLET DRAINAGE PIPES. CHECK TO MAKE SURE THE BYPASS CHAMBER IS SET FLUSH, LEVEL AND IS AT THE PROPER ELEVATION. THE BYPASS CHAMBER MUST BE ORIENTED SUCH THAT INLET PIPE DISCHARGES INTO THE V-SHAPED FIBERGLASS WEIRS (INSIDE INSERT). INSTALL RUBBER GASKET ON TOP OF BYPASS SECTION AND COAT WITH LUBRICATING GREASE, IF NOT PRELUBRICATED.

INSTALL STORMCEPTOR DROP PIPES ACCORDING TO STC PIPE INSTALLATION PROCEDURES ON REVERSE SIDE OF THESE INSTRUCTIONS.

INSTALL RISER SECTION. LIFT RISER SECTION AND INSTALL, WHILE CHECKING THAT SECTION IS SET FLUSH AND IS AT PROPER ELEVATION AND THAT UNIT IS LEVEL. SPECIFIC ALIGNMENT OF THIS PART IS REQUIRED, IF STEP(S) ARE INCLUDED. ALIGN STEPS ABOVE INLET INSPECTION PORT. NOTE, FOR SHALLOW INSTALLATIONS THIS SECTION MAY NOT BE REQUIRED.

INSTALL TOP SLAB WITH OPENING FOR STORMCEPTOR COVER. IF OPENING IS OFFSET (NOT CENTERED) THE TOP SLAB OPENING SHOULD BE ORIENTED ABOVE THE STORMCEPTOR INLET INSPECTION PORT (PLUG).

BACKFILL STORMCEPTOR WITH APPROVED BACKFILL MATERIAL (NO ORGANIC OR TOPSOIL IS TO BE USED FOR BACKFILL). BACKFILL AND COMPACT IN 8 INCH LIFTS. BACKFILL SHOULD BE COMPACTED TO LOCAL/STATE REQUIREMENTS.

INSTALL AND SET GRADE ADJUSTING RINGS, AS NEEDED. PLUG ALL LIFT HOLES WITH TAPERED FLEXIBLE PLUG AND KNOCK IN TO PLACE. PLUGS IN STORAGE CHAMBER MUST BE GROUTED INSIDE AND OUTSIDE WITH GROUT.

INSTALL AND SET STORMCEPTOR FRAME AND COVER.

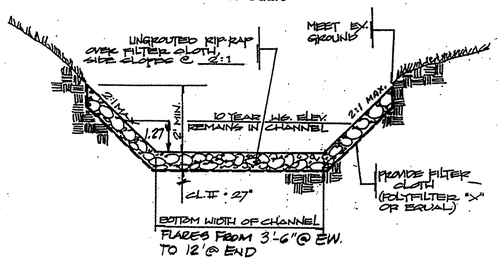
INSTALL INLET AND OUTLET STORM DRAIN PIPES. CONNECT INLET AND OUTLET STORMDRAIN PIPES WITH FLEXIBLE BOOTS (WHEN PROVIDED AND WITH NON-SHRINK GROUT WHEN NO FLEXIBLE BOOTS ARE PROVIDED. THE INVERT OF THE INLET AND OUTLET PIPE IS TO MATCH WITH THE INVERT OF THE STORMCEPTOR INSERT. FLEXIBLE BOOT INSTALLATION PROCEDURES: CENTER THE PIPE IN BOOT OPENING. LUBRICATE THE OUTSIDE OF THE PIPE AND/OR THE INSIDE OF THE BOOT, IF THE PIPE OUTSIDE DIAMETER IS THE SAME AS THE INSIDE DIAMETER OF THE BOOT. POSITION THE PIPE CLAMP IN THE GROVE OF THE BOOT WITH THE SCREW AT THE TOP. TIGHTEN THE PIPE CLAMP SCREW TO 60 INCH POUNDS. IF THE PIPE IS MUCH SMALLER THAN THE BOOT LIFT THE BOOT SUCH THAT IT CONTACTS THE BOTTOM OF THE PIPE WHILE TIGHTENING THE CLAMP TO ENSURE EVEN CONTRACTION OF THE RUBBER. MOVE PIPE HORIZONTALLY AND/OR VERTICALLY TO BRING TO GRADE.

THE STORMCEPTOR SHOULD BE PUMPED OUT WHEN THE SEDIMENT CONTROL MEASURES ARE REMOVED (SITE PERMANENTLY STABILIZED).

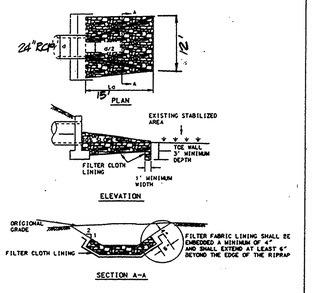
FINAL INSPECTION

TYPICAL RIP-RAP OUTFALL CHANNEL

not to scale



DETAIL 27 - ROCK OUTLET PROTECTION III



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE 7 - 9 - 10 | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

ROCK OUTLET PROTECTION III

Construction Specifications

1. The subgrade for the filter, rip-rap, or gabion shall be prepared to the required lines and grades. Any fill required in the subgrade shall be compacted to a density of approximately that of the surrounding undisturbed material.

2. The rock or gravel shall conform to the specified grading limits when installed respectively in the rip-rap or filter.

3. Geotextile shall be protected from punching, cutting, or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of geotextile over the damaged part or by completely replacing the geotextile. All overlaps whether for repairs or for joining two pieces of geotextile shall be a minimum of one foot.

4. Stone for the rip-rap or gabion outlets may be placed by equipment. They shall be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of underlying materials. The stone for rip-rap or gabion outlets shall be delivered and placed in a manner that will ensure that it is reasonably homogeneous with the smaller stones and spalls filling the voids between the larger stones. Rip-rap shall be placed in a manner to prevent damage to the filter blanket or geotextile. Hand placement will be required to the extent necessary to prevent damage to the permanent works.

5. The stone shall be placed so that it blends in with the existing ground. If the stone is placed too high then the flow will be forced out of the channel and scour adjacent to the stone will occur.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE | PAGE 7 - 10 - 10A | MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTIONWILL BE DONE IN ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. ~~I/WE WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A REVISED PLAN IF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~ I/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

JOSEPH NAZARIO / OWNER — DATE 5-1-98
NAZARIO DEVELPMENT AND COMPANY

BY THE ENGINEER:

I/WE CERTIFY THAT THIS PLAN FOR ~~ZONE CONSTRUCTION~~, SOIL EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. ~~I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~

FRED L. SKELTON - MD. REGISTRATION No. 9070 — DATE 6/5/98
IPDS, LLC

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

U. S. SOIL CONSERVATION SERVICE — DATE 9/30/98

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — DATE 9/30/98

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 10/6/98

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 10/5/98

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10/1/98

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

N/A
DIRECTOR — DATE

CHIEF, BUREAU OF ENGINEERING — DATE

AS BUILT CERTIFICATE

FRED L. SKELTON - MD. REGISTRATION No. 9070 — DATE
IPDS, LLC

OWNER \ DEVELOPER

Joseph Nazario
Nazario Development and Company
6500 Ammendale Road
Beltsville, Maryland 20705
(301) 937-4664

STATE OF MARYLAND — FRED LEO SKELTON — No. 9070 — REGISTERED PROFESSIONAL ENGINEER

SDP-98-135

IPDS
The Interprofessional PLANNING & DESIGN STUDIO, LLC
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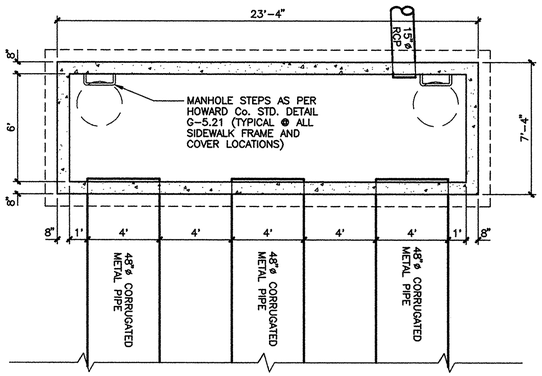
Silver Spring, Maryland, 20910
(301) 585-5676
Engineers • Architects • Surveyors
Planners & Landscape Architects

DETAILS AND STORM DRAIN PROFILES

U.S. No.1 JOINT VENTURE
PARCEL "A", PLAT CMP No. 3692, WAREHOUSE
GUILFORD ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND
CENSUS TRACT 6069.02, TAX MAP 47, BLOCK 22/23
WATER CODE C04, SEWER CODE 7220000

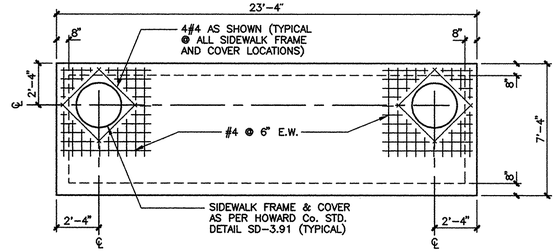
AS NOTED — SCALE:
06-18-98 — REVISIONS:
01-18-98 — DATE:
JOB NUMBER:
SWM-2
SHEET 9 OF 13

SDP-98-135



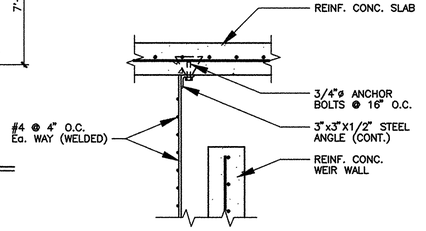
JUNCTION BOX No. 5 - PLAN VIEW

SCALE: 1/4"=1'-0"



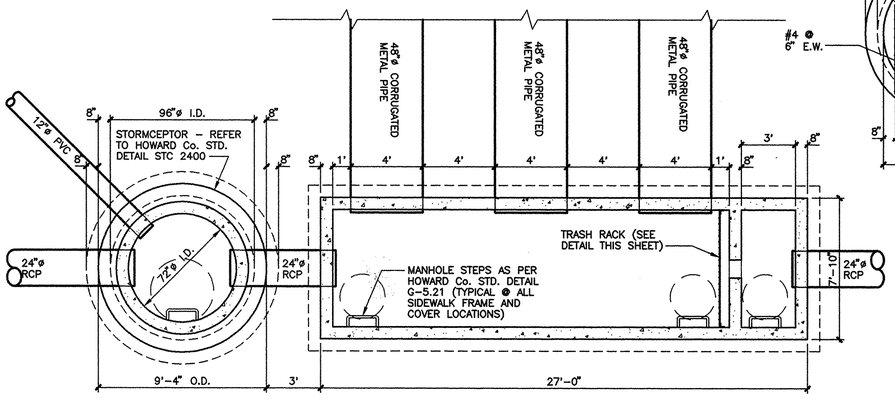
JUNCTION BOX No. 5 - TOP SLAB DETAIL

SCALE: 1/4"=1'-0"



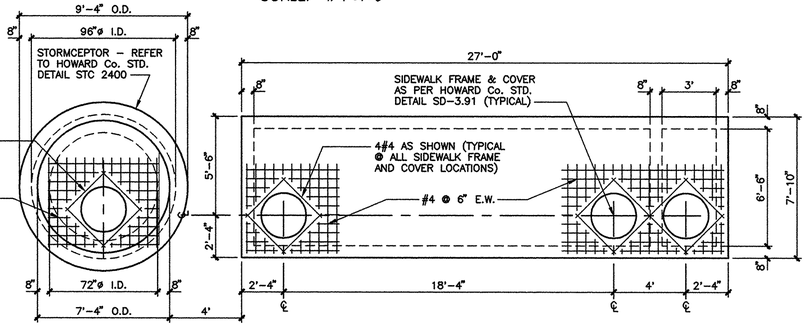
DETAIL - TRASH RACK

SCALE: 3/4"=1'-0"



JUNCTION BOX No. 4 - PLAN VIEW

SCALE: 1/4"=1'-0"



JUNCTION BOX No. 4 - TOP SLAB DETAIL

SCALE: 1/4"=1'-0"

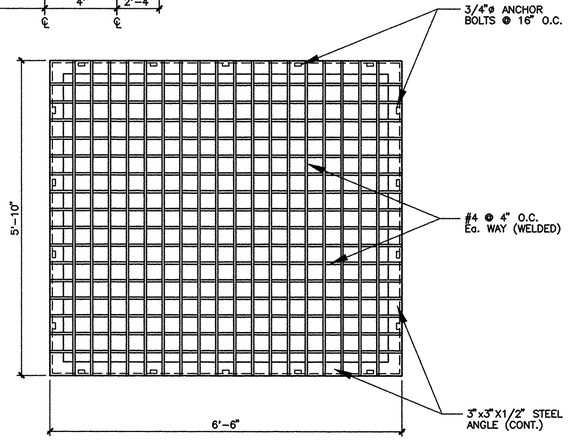
UNDERGROUND PIPE STORAGE (PRIVATE)

SPECIFICATIONS FOR CONSTRUCTION

1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER AND HOWARD COUNTY FOR APPROVAL PRIOR TO COMMENCING WORK.
2. ALL WORK SHALL BE PLACED ON UNDISTURBED SUBGRADE. ANY OVER-EXCAVATION SHALL BE BACKFILLED WITH CR-6 CRUSHED RUN AND COMPACTED TO 95% AASHTO UNDER DIRECTION OF ENGINEER. NO CONSTRUCTION SHALL BE PLACED ON WET OR FROZEN GROUND.
3. ALL WELDING SHALL BE DONE BY MANUFACTURER'S WELDER. WELDS SHALL BE WATERPROOFED PRIOR TO BACKFILLING AND FINAL INSPECTION.
4. ALL STEEL USED FOR STORAGE STRUCTURE SHALL BE CORRUGATED STEEL ALUMINIZED PIPE, 12 GUAGE.
5. THE CONTRACTOR SHALL GUARANTEE TOTAL RUST-PROOFING OF THE STEEL PIPE.
6. PIPES SHALL BE BEDDED IN 12" OF SAND.
7. MINIMUM COVER SHALL BE 18".

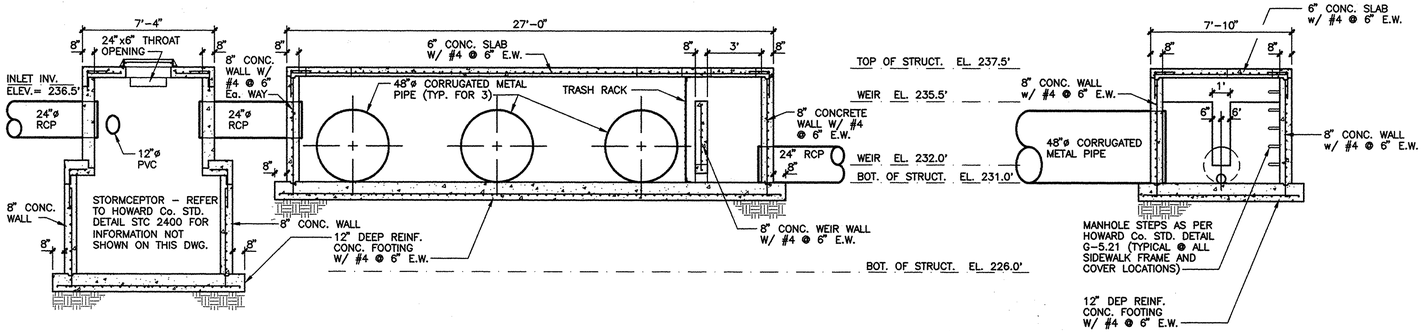
NOTES

1. REFER TO ARMCO, INC. METAL PRODUCTS DIVISION (OR EQUAL AND APPROVED) FOR LOCATIONS OF WELDED CONNECTIONS.
2. SHOP DRAWINGS TO BE SUBMITTED TO HOWARD COUNTY AND THE ENGINEER PRIOR TO CONSTRUCTION.



ELEVATION - TRASH RACK

SCALE: 3/4"=1'-0"

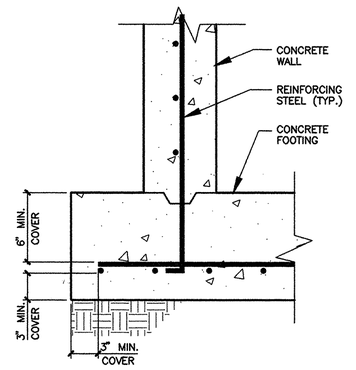


JUNCTION BOX No. 4 - LONGITUDINAL SECTION

SCALE: 1/4"=1'-0"

JUNCTION BOX No. 4 - CROSS SECTION

SCALE: 1/4"=1'-0"



TYPICAL FOOTING DETAIL

NO SCALE

GENERAL NOTES:

1. CONCRETE STRENGTH SHALL BE fc' = 5000 PSI @ 28 DAYS.
2. ALL REINFORCING STEEL TO BE ASTM A615 GRADE 60.
3. PROVIDE MINIMUM 3" CONCRETE COVER ON ALL BELOW GRADE REINFORCING STEEL, UNLESS OTHERWISE SPECIFIED. PROVIDE MINIMUN 2" CONCRETE COVER ON ALL ABOVE GRADE REINFORCING STEEL, UNLESS OTHERWISE SPECIFIED.
4. FOR INFORMATION NOT SHOWN REFER TO DER STD. DTL. SD/10.0 AND SD/10.1.
5. ALL LAP REINFORCEMENT TO BE 32 TIMES REBAR DIAMETER (MIN.).
6. FOR PRECAST STRUCTURE SUBMIT SHOP DRAWINGS TO PERMITS AND REVIEW DIVISION FOR APPROVAL.
7. PROVIDE WATERTIGHT JOINTS AT ALL WALL PENETRATIONS.

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTIONWILL BE DONE IN ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. ~~I/WE WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~ I/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

JOSEPH NAZARIO / OWNER — DATE 5-1-98
NAZARIO DEVELPMENT AND COMPANY

BY THE ENGINEER:

I/WE CERTIFY THAT THIS PLAN FOR ~~POND CONSTRUCTION~~, SOIL EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. ~~I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~

FRED L. SKELTON - MD. REGISTRATION No. 9070 — DATE 6/6/98
IPDS, LLC

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE — DATE 9/30/98

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — DATE 9/30/98

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 10/6/98

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 10/5/98

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10/1/98

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

N/A

DIRECTOR — DATE

CHIEF, BUREAU OF ENGINEERING — DATE

AS BUILT CERTIFICATE

FRED L. SKELTON - MD. REGISTRATION No. 9070 — DATE
IPDS, LLC

OWNER \ DEVELOPER

Joseph Nazario
Nazario Development and Company
6500 Ammendale Road
Beltsville, Maryland 20705
(301) 937-4664

IPDS
The Interprofessional PLANNING & DESIGN STUDIO, LLC
802 Sligo Avenue
Silver Spring, Maryland, 20910
(301) 585-5676
Engineers • Architects • Surveyors
Planners & Landscape Architects

STORMWATER MANAGEMENT DETAILS

U.S. No.1 JOINT VENTURE
PARCEL "A", PLAT CMP No. 3592, WAREHOUSE
GUILFORD ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND
CENSUS TRACT 6069.02, TAX MAP 47, BLOCK 22/23
WATER CODE C04, SEWER CODE 7220000

AS NOTED
SCALE:

06-18-98
REVISIONS:

01-18-98
DATE:

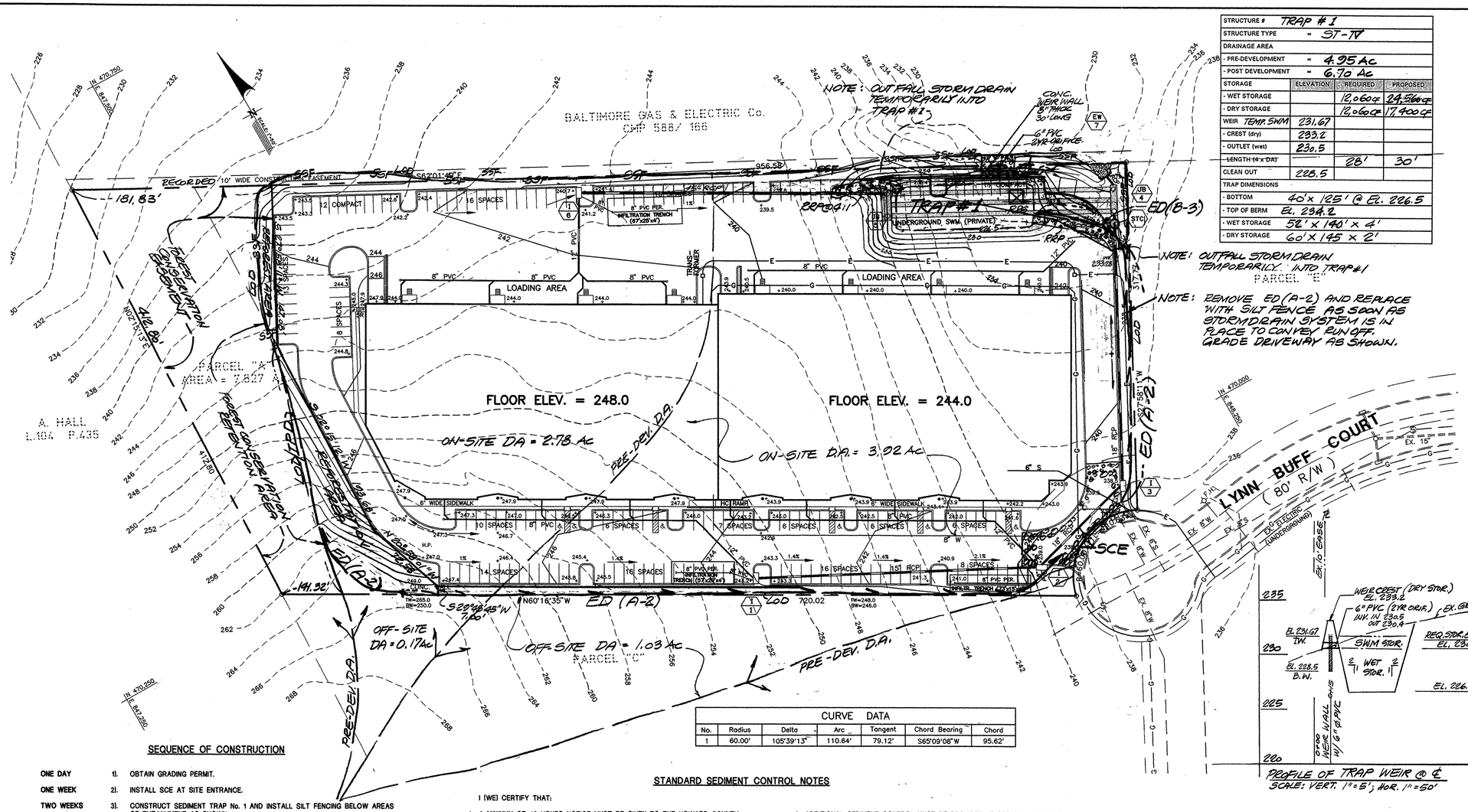
JOB NUMBER:

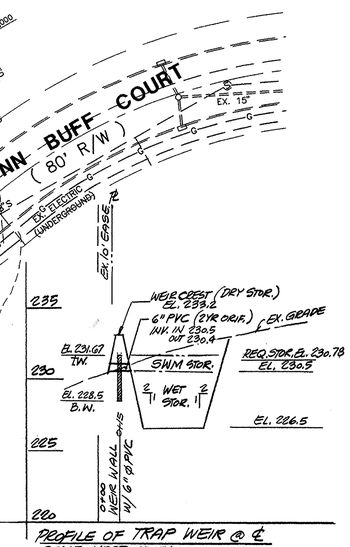
SWM-3
SHEET 10 OF 13

SDP-98-135

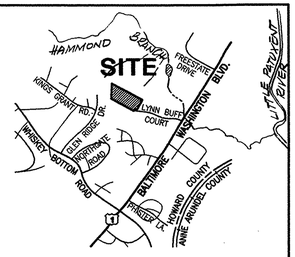
SDP-98-135

STRUCTURE #	TRAP #1		
STRUCTURE TYPE	= ST-IV		
DRAINAGE AREA			
- PRE-DEVELOPMENT	= 4.95 Ac		
- POST DEVELOPMENT	= 6.70 Ac		
STORAGE	ELEVATION	REQUIRED	PROPOSED
- WET STORAGE		12,060 cf	24,586 cf
- DRY STORAGE		12,060 cf	17,900 cf
WEIR TEMP. SWM	231.67		
- CREST (dry)	233.2		
- OUTLET (wet)	230.5		
~~LENGTH (4 x DIA)~~		28'	30'
CLEAN OUT	228.5		
TRAP DIMENSIONS			
- BOTTOM	40'x 125' @ El. 226.5		
- TOP OF BERM	El. 234.2		
- WET STORAGE	52' x 140' x 4'		
- DRY STORAGE	60' x 145 x 2'		





PROFILE OF TRAP WEIR @ ℄
SCALE: VERT. 1"=5'; HOR. 1"=50'



VICINITY MAP

SCALE: 1"=2000'

HOWARD Co. MAP PAGE 20; GRID B-10

IPDS
The interprofessional PLANNING & DESIGN STUDIO, LLC
Engineers • Architects • Surveyors
Planners & Landscape Architects
802 Sligo Avenue
Silver Spring, Maryland, 20910
(301) 585-5676

EROSION AND SEDIMENT CONTROL PLAN

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTIONWILL BE DONE IN ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. ~~I/WE WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~ I/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

JOSEPH NAZARIO - OWNER
NAZARIO DEVELOPMENT AND COMPANY — DATE 2-6-98

BY THE ENGINEER:

I/WE CERTIFY THAT THIS PLAN FOR ~~POND CONSTRUCTION~~, SOIL EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. ~~I HAVE NOTIFIED THE DEVELOPER THAT HE MUST THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~

FRED L. SKELTON - MD. REGISTRATION No. 9070
IPDS, LLC — DATE 05-01-98

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR ~~SMALL POND CONSTRUCTION~~, SOIL EROSION AND SEDIMENT CONTROL.

NATURAL RESOURCES CONSERVATION SERVICE — DATE 9/30/98

THESE PLANS FOR ~~SMALL POND CONSTRUCTION~~, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT

HOWARD SOIL CONSERVATION DISTRICT — DATE 9/30/98

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

N/A

COUNTY HEALTH OFFICER — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 10/6/98

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 10/5/98

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 10/1/98

AS BUILT CERTIFICATE

FRED L. SKELTON - MD. REGISTRATION No. 9070
IPDS, LLC — DATE

U.S. No.1 JOINT VENTURE
PARCEL "A", PLAT CMP No. 3592, WAREHOUSE
GUILFORD ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND
CENSUS TRACT 6089.02, TAX MAP 47, BLOCK 22/23
WATER CODE C04, SEWER CODE 7220000

AS NOTED
SCALE: 1"=50'

REVISIONS: 6/30/98

01-06-98
DATE:

JOB NUMBER:

SC-1
SHEET 11 OF 13

SEQUENCE OF CONSTRUCTION

ONE DAY	1).	OBTAIN GRADING PERMIT.
ONE WEEK	2).	INSTALL SCE AT SITE ENTRANCE.
TWO WEEKS	3).	CONSTRUCT SEDIMENT TRAP No. 1 AND INSTALL SILT FENCING BELOW AREAS OF EMBANKMENT AS SHOWN.
TWO DAYS	4).	INSTALL DIVERSION UPSTREAM ALONG SOUTH AND WEST PROPERTY LINE TO PREVENT SURFACE RUN-OFF OVER CUT AREAS AND INSTALL TPD FENCING AS SHOWN ON PLAN & DETAIL (SHEET 2 of 8)
ONE WEEK	5).	INSTALL ALL REMAINING SEDIMENT CONTROL MEASURES AS SHOWN ON PLANS AND NOTES, INCLUDING BUT NOT LIMITED TO TRAP No. 1, EARTH DIKES, SILT FENCES AND OUTLET STRUCTURES. INSTALL STORM DRAIN PIPE AND OUT-FALL STRUCTURES No. 1 THRU No. 3 TEMPORARILY INTO TRAP FOR CONVEYANCE OF SEDIMENT LADEN RUN-OFF.
SIX MONTHS	6).	CONSTRUCT BUILDING PAD AND ROUGH GRADE SITE. INSTALLATION OF UNDERGROUND SWM PIPES SHALL BE DEFERRED UNTIL TRAP No. 1 CAN BE REMOVED. BUILDING CONSTRUCTION MAY START AS SOON AS THE BUILDING PAD IS ESTABLISHED. SEDIMENT CONTROL MEASURES INSTALLED FOR PAD CONSTRUCTION SHALL BE MAINTAINED AS SHOWN ON THE APPROVED SEDIMENT CONTROL PLAN.
TWO MONTHS	7).	UPON APPROVAL BY INSPECTOR, FINAL GRADE SITE CONSTRUCT RETAINING WALLS AND STABILIZE ROADWAYS.
THREE MONTHS	8).	INSTALL GAS AND ELECTRIC, SEWER, WATER & REMAINING STORM DRAIN AND INFILTRATION TRENCHES.
THREE WEEKS	9).	CONSTRUCT CURB & GUTTER AND BASE COURSE IN ROADWAYS.
TWO WEEKS	10).	PAVE ROADWAYS AND STABILIZE ANY REMAINING AREAS. ITEMS No. 8 & No. 9 MAY BE CARRIED OUT CONCURRENTLY.
FOUR WEEKS	11).	UPON PERMANENT VEGETATIVE STABILIZATION OF SITE AND UPON APPROVAL BY INSPECTOR, TRAP IS TO BE CLEANED OUT AND SEDIMENT REMOVED. THE TEMPORARY STOCK PILE AREA MAY BE USED AS DISPOSAL SITE. THE STORM DRAIN SYSTEM SHALL BE FLUSHED AND ALL SEDIMENT REMOVED BEFORE THE SEDIMENT TRAP CAN BE FILLED IN AND UNDERGROUND SWM PIPES CAN BE INSTALLED. FLUSHING SHALL BE DONE AFTER ITEM No. 9 OF THE SEQUENCE OF CONSTRUCTION IS COMPLETED. SILT SE FENCE DOWNSTREAM FROM SWM FACILITY SHALL STAY IN PLACE UNTIL INSTALLATION OF SWM PIPES.
ONE WEEK	12).	UPON APPROVAL OF INSPECTOR, REMOVE ALL REMAINING SEDIMENT CONTROL MEASURES.

NOTE: PHASES OF THE DEVELOPMENT WHICH ARE COMPLETED AND ARE INDEPENDENT FROM OTHER AREAS MAY BE SIGNED OFF BY THE INSPECTOR AT HIS DISCRETION.

CURVE DATA						
No.	Radius	Delta	Arc	Tangent	Chord Bearing	Chord
1	60.00'	105°39'13"	110.64'	79.12'	S65°09'08"W	95.62'

STANDARD SEDIMENT CONTROL NOTES

I (WE) CERTIFY THAT:

1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1855).
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.
3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7 OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING, SOD, TEMPORARY SEEDING, AND MULCHING (SECS. G). TEMPORARY STABILIZATION WITH MULCH ALONE SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7. SITE ANALYSIS:

TOTAL AREA OF SITE	=	7.527 Ac.
AREA DISTURBED (TOTAL)	=	6.7 Ac.
AREA TO BE ROOFED OR PAVED	=	5.4 Ac.
AREA TO VEGETATIVELY STABILIZED	=	1.3 Ac.
TOTAL CUT	=	26,000 CY
TOTAL FILL	=	10,000 CY
OFFSITE WASTE AREA LOCATION	=	MARINUCCI TRACT, LAUREL P.G.Co. SC # 92-98 (PERMIT # 8354-97-G

8. ANY SEDIMENT CONTROL PRACTICE WHICH DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
9. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
12. ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE IN ACCORDANCE WITH THIS SEDIMENT AND EROSION CONTROL PLAN, AND FURTHER, AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY THE HOWARD COUNTY INSPECTION STAFF OR THEIR AUTHORIZED AGENTS.
13. ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE FROM THE MARYLAND DEPARTMENT OF THE ENVIRONMENT'S APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. RESPONSIBLE PERSON ON SITE: AARON SMILEY.
14. THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS, RIGHT-OF-WAY(S) THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORMWATER MANAGEMENT PRACTICES, AND THE DISCHARGE OF STORMWATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS, AND/OR RIGHT-OF-WAY(S) THAT MAY BE REQUIRED FOR GRADING AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.
15. THE SEDIMENT CONTROL APPROVALS ON THIS PLAN EXTEND ONLY TO AREAS AND PRACTICES IDENTIFIED AS PROPOSED WORK.
16. THE APPROVAL OF THIS PLAN FOR SEDIMENT AND EROSION CONTROL DOES NOT RELIEVE THE DEVELOPER/CONSULTANT FROM COMPLYING WITH ANY FEDERAL/STATE COUNTY REQUIREMENTS APPURTENANT TO ENVIRONMENTAL ISSUES.

LEGEND

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE		
TREELINE		
CONTOUR LINE	250	250
SPOT ELEVATION		+250
STORMDRAIN PIPE		
LIMIT OF DISTURBANCE		L.O.D.
SILT FENCE		S.F.
HANDICAPPED SPACE		
FIRE HYDRANT	FH	FH
CURB & GUTTER		
WHEELCHAIR RAMP		
TOP OF WALL		T.W.
BOTTOM OF WALL		B.W.

STATE OF MARYLAND — FRED LEO SKELTON — No. 9070 — REGISTERED PROFESSIONAL ENGINEER

OWNER \ DEVELOPER

Joseph Nazario
Nazario Development and Company
6500 Ammendale Road
Beltsville, Maryland 20705
(301) 937-4664

SDP-98-135

DETAILS & SPECIFICATIONS - VEGETATIVE ESTABLISHMENT

FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN SEVEN CALENDAR DAYS FOR THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND FOURTEEN DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

1. PERMANENT SEEDING:
A. SOIL TESTS: LIME AND FERTILIZER WILL BE APPLIED PER SOIL TESTS RESULTS FOR SITES GREATER THAN 5 ACRES. SOIL TESTS WILL BE DONE AT COMPLETION OF ROUGH GRADING. RATES AND ANALYSES WILL BE PROVIDED TO THE GRADING INSPECTOR AS WELL AS THE CONTRACTOR.
1. OCCURRENCE OF ACID SULFATE SOILS (GRAYISH BLACK COLOR) WILL REQUIRE COVERING WITH A MINIMUM OF 12 INCHES OF CLEAN SOIL WITH 6 INCHES MINIMUM CAPPING OF TOP SOIL. NO STOCKPILING OF MATERIAL IS ALLOWED. IF NEEDED, SOIL TESTS SHOULD BE DONE BEFORE AND AFTER A 6 WEEK INCUBATION PERIOD TO ALLOW OXIDATION OF SULFATES.

B. SEEDBED PREPARATION: AREA TO BE SEEDED SHALL BE LOOSE AND FRIABLE TO A DEPTH OF AT LEAST 3 INCHES. THE TOP LAYER SHALL BE LOOSENED BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING OCCURS. FOR SITES LESS THAN 5 ACRES, APPLY 100 POUNDS OF DOLOMITIC LIMESTONE AND 21 POUNDS OF 10-20-20 FERTILIZER PER 1,000 SQUARE FEET. HARROW OR DISK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF AT LEAST 3 INCHES ON SLOPES FLATTER THAN 3:1.

C. SEEDING: APPLY 5-8 POUNDS PER 1,000 SQUARE FEET OF TALL FESCUE BETWEEN FEBRUARY 1 AND APRIL 30 OR BETWEEN AUGUST 15 AND OCTOBER 31. APPLY SEED UNIFORMLY ON A MOIST FIRM SEEDBED WITH A CYCLONE SEEDED DRILL, CULTIPACKER SEEDER OR HYDROSEEDER (SLURRY INCLUDES SEEDS AND FERTILIZER, RECOMMENDED ON STEEP SLOPES ONLY). MAXIMUM SEED DEPTH SHOULD BE 1/4 INCH IN CLAYEY SOILS AND 1/2 INCH IN SANDY SOILS WHEN USING OTHER THAN THE HYDROSEEDER METHOD. IRRIGATE IF SOIL MOISTURE IS DEFICIENT TO SUPPORT ADEQUATE GROWTH UNTIL VEGETATION IS FIRMLY ESTABLISHED. IF OTHER SEED MIXES ARE TO BE USED, SELECT FROM TABLE 25, ENTITLED "PERMANENT SEEDING FOR LOW MAINTENANCE AREAS" FROM THE 1994 STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. MIXES SUITABLE FOR THIS AREA ARE 1,3 AND 5-7. MIXES 5-7 ARE SUITABLE IN NON-MOWABLE SITUATIONS.

D. MULCHING: MULCH SHALL BE APPLIED TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING DURING THE TIME PERIODS WHEN SEEDING IS NOT PERMITTED. MULCH SHALL BE APPLIED IMMEDIATELY AFTER GRADING.
MULCH SHALL BE UNROTTED, UNCHOPPED, SMALL GRAIN STRAW APPLIED AT A RATE OF 2 TONS PER ACRE OR 90 POUNDS PER 1,000 SQUARE FEET (2 BALES). IF A MULCH ANCHORING TOOL IS USED, APPLY 2.5 TONS PER ACRE. MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEEDS AND SHALL BE FREE OF PROHIBITED NOXIOUS WEEDS. SPREAD MULCH UNIFORMLY, MECHANICALLY OR BY HAND, TO A DEPTH OF 1-2 INCHES.

E. SECURING STRAW MULCH: STRAW MULCH SHALL BE SECURED IMMEDIATELY FOLLOWING MULCH APPLICATION TO MINIMIZE MOVEMENT BY THE WIND OR THE WATER. THE FOLLOWING METHODS ARE PERMITTED:
1. USE A MULCH ANCHORING TOOL WHICH IS DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE TO A MINIMUM DEPTH OF 2 INCHES. THIS IS THE MOST EFFECTIVE METHOD FOR SECURING MULCH, HOWEVER, IT IS LIMITED TO RELATIVELY FLAT AREAS WHERE EQUIPMENT CAN OPERATE SAFELY.
2. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. IF MIXED WITH WATER, USE 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
3. LIQUID BINDERS MAY BE USED AND APPLIED HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF SLOPES. THE REMAINDER OF THE AREA SHOULD APPEAR UNIFORM AFTER BINDER APPLICATION. BINDERS LISTED IN THE 1994 STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL OR APPROVED EQUAL SHALL BE APPLIED AT RATES RE RECOMMENDED BY THE MANUFACTURER.
4. LIGHTWEIGHT PLASTIC NETTING MAY BE USED TO SECURE MULCH. THE NETTING WILL BE STAPLED TO THE GROUND ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

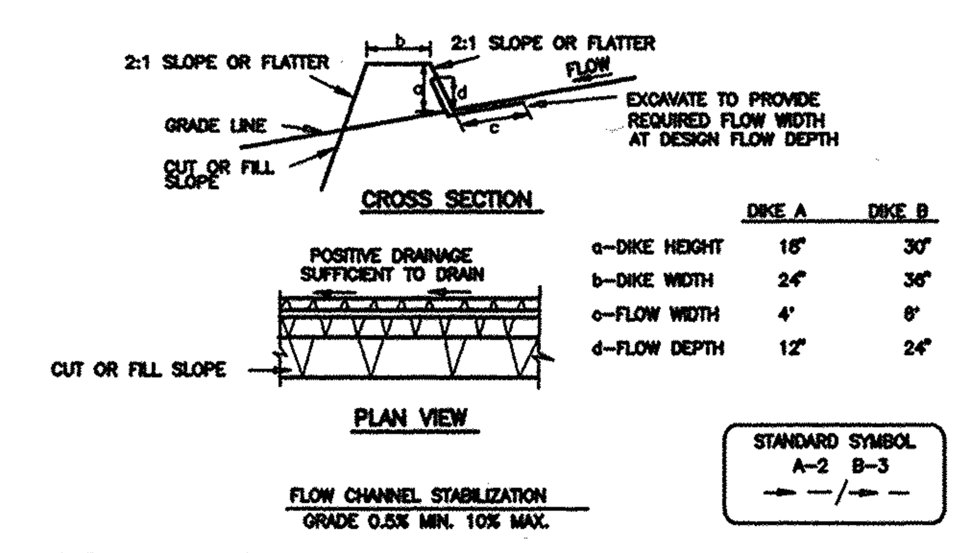
2. TEMPORARY SEEDING:
LIME: 100 POUNDS OF DOLOMITIC LIMESTONE PER 1,000 SQUARE FEET
FERTILIZER: 15 POUNDS OF 10-10-10 PER 1,000 SQUARE FEET.
SEED: PERENNIAL RYE - 0.92 POUNDS PER 1,000 SQUARE FEET (FEBRUARY 1 THROUGH APRIL 30 OR AUGUST 15 THROUGH NOVEMBER 1). MILLET - 0.92 POUNDS PER 1,000 SQUARE FEET (MAY 1 THROUGH AUGUST 15).
MULCH: SAME AS 1 D AND E ABOVE.

3. NO FILLS MAY BE PLACED ON FROZEN GROUND. ALL FILL TO BE PLACED IN APPROXIMATELY HORIZONTAL LAYERS, EACH LAYER HAVING A LOOSE THICKNESS OF NOT MORE THAN 8 INCHES. ALL FILL IN ROADWAYS AND PARKING AREAS IS TO BE CLASSIFIED TYPE 2 AND COMPACTED TO 90% DENSITY; COMPACTION TO BE DETERMINED BY ASTM D-1557-66T (MODIFIED PROCTOR). ANY FILL WITHIN THE BUILDING AREA IS TO BE COMPACTED TO A MINIMUM OF 95% AS DETERMINED BY METHODS PREVIOUSLY MENTIONED. FILLS FOR POND EMBANKMENTS SHALL BE COMPACTED AS PER MD-378 CONSTRUCTION SPECIFICATIONS. ALL OTHER FILLS SHALL BE COMPACTED SUFFICIENTLY SO AS TO BE STABLE AND PREVENT EROSION AND SLIPPAGE.

4. PERMANENT SOD:
INSTALLATION OF SOD SHOULD FOLLOW PERMANENT SEEDING DATES. PERMANENT SOD IS TO BE TALL FESCUE, STATE APPROVED SOD; LIME AND FERTILIZER PER PERMANENT SEEDING SPECIFICATIONS AND LIGHTLY IRRIGATE SOIL PRIOR TO LAYING SOD. SOD IS TO BE LAID ON THE CONTOUR WITH ALL ENDS TIGHTLY ABUTTING. JOINTS ARE TO BE STAGGERED BETWEEN ROWS. WATER AND ROLL OR TAMP SOD TO INSURE POSITIVE ROOT CONTACT WITH THE SOIL. ALL SLOPES STEEPER THAN 3:1, AS SHOWN, ARE TO BE PERMANENTLY SODDED OR PROTECTED WITH AN APPROVED EROSION CONTROL NETTING. ADDITIONAL WATERING FOR ESTABLISHMENT MAY BE REQUIRED. SOD IS NOT TO BE APPLIED ON FROZEN GROUND. SOD SHALL NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (DRY OR WET) AND/OR EXTREME TEMPERATURE MAY ADVERSELY AFFECT ITS SURVIVAL. IN THE ABSENCE OF ADEQUATE RAINFALL, IRRIGATION SHOULD BE PERFORMED TO INSURE ESTABLISHED SOD.

5. TOPSOIL
A. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.
B. TOPSOIL SPECIFICATION - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:
1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM,SANDY CLAY LOAM, AND LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2" IN DIAMETER.
2. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
3. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.
C. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:
1. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION - SECTION I VEGETATIVE STABILIZATION METHODS AND MATERIALS.
NOTE: USE OF THIS INFORMATION DOES NOT PRECLUDE MEETING ALL OF THE REQUIREMENTS OF THE "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL".
D. TOPSOILT APPLICATION:
1. WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS, AND BASINS.
2. GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4"-8" HIGHER IN ELEVATION.
3. TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4"-8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROMTOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
4. TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FRAZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

DETAIL 1 - EARTH DIKE



	DIKE A	DIKE B
a-DIKE HEIGHT	18"	30"
b-DIKE WIDTH	24"	36"
c-FLOW WIDTH	4'	6'
d-FLOW DEPTH	12"	24"

1. Seed and cover with straw mulch.
2. Seed and cover with Erosion Control Matting or line with sod.
3. 4" - 7" stone or recycled concrete equivalent pressed into the soil 7" minimum

CONSTRUCTION SPECIFICATIONS

1. All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.

2. Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.

3. Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-erosive velocity.

4. All trees, brush, stumps, obstructions, and other objectional material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.

5. The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.

6. Fill shall be compacted by earth moving equipment.

7. All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.

8. Inspection and maintenance must be provided periodically and after each rain event.

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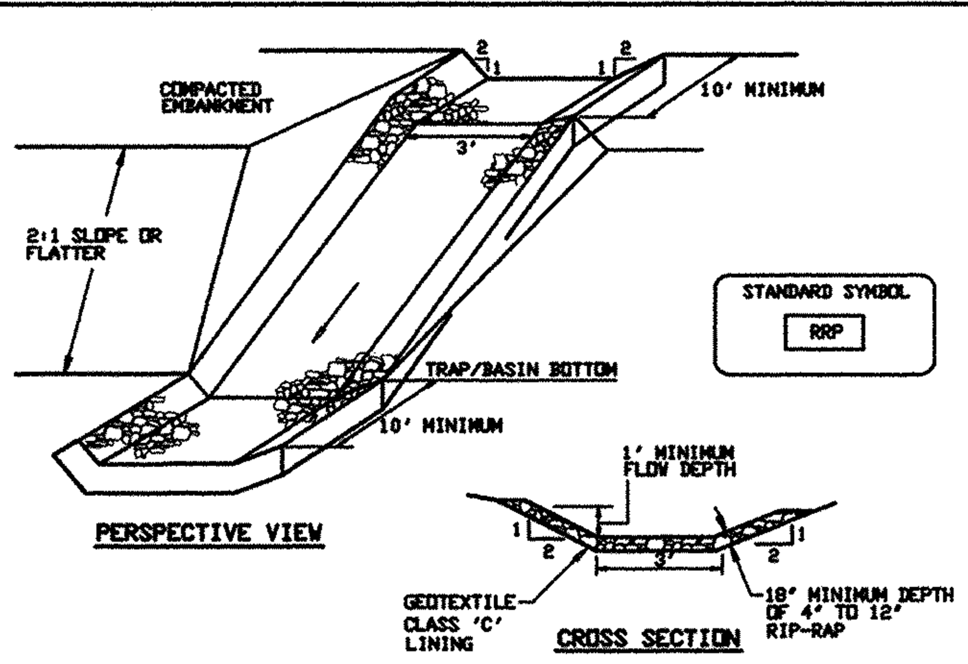
DETAIL 5 - RIP-RAP INFLOW PROTECTION



CONSTRUCTION SPECIFICATIONS

1. Rip-rap lined inflow channels shall be 1' in depth, have a trapezoidal cross section with 2:1 or flatter side slopes and 3' (min.) bottom width. The channel shall be lined with 4" to 12" rip- rap to a depth of 18".

2. Filter cloth shall be installed under all rip-rap. Filter cloth shall be Geotextile Class C.

3. Entrance and exit sections shall be installed as shown on the detail section.

4. Rip-rap used for the lining may be recycled for permanent outlet protection if the basin is to be converted to a stormwater management facility.

5. Gabion Inflow Protection may be used in lieu of Rip-rap Inflow Protection.

6. Rip-rap should blend into existing ground.

7. Rip-rap Inflow Protection shall be used where the slope is between 4:1 and 10:1, for slopes flatter than 10:1 use Earth Dike or Temporary Swale lining criteria.

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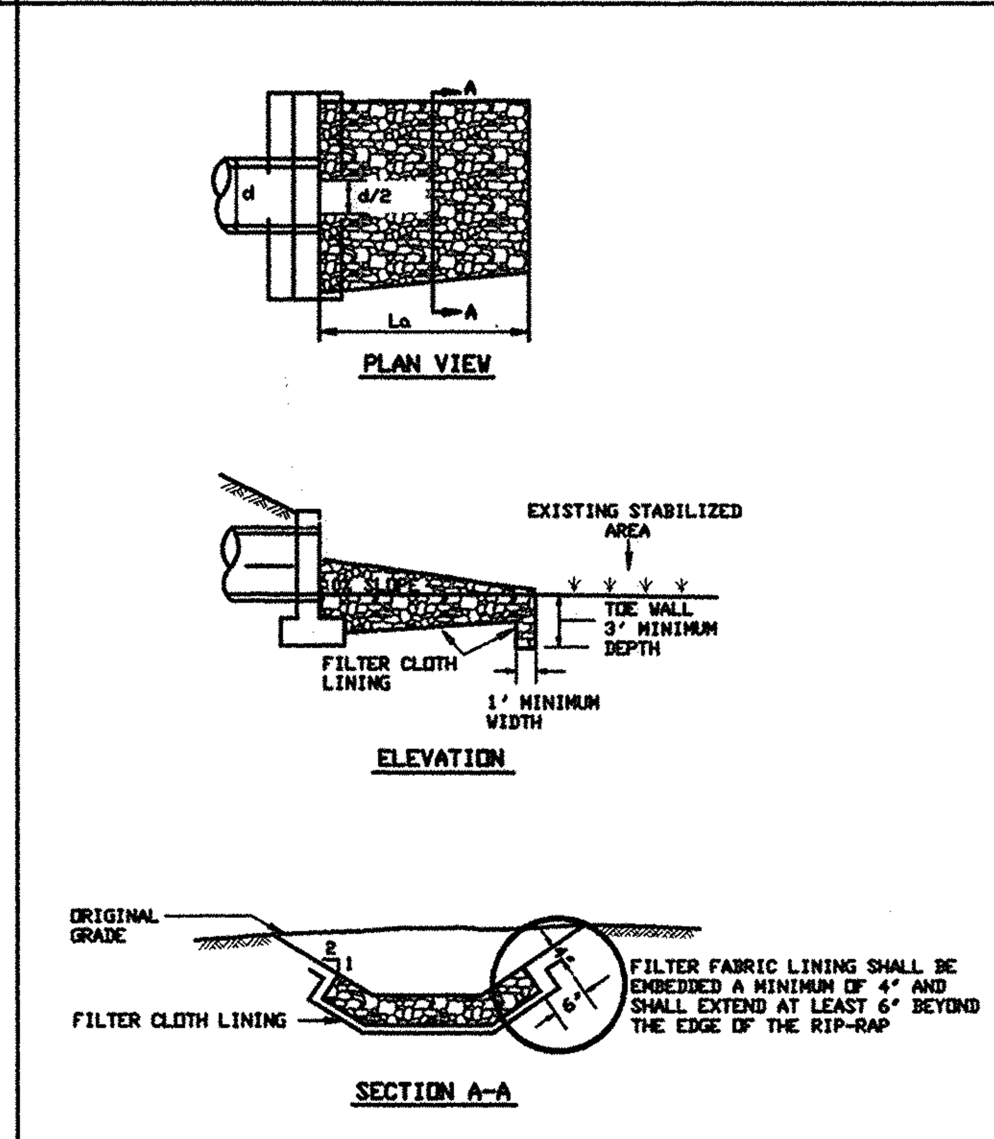
DETAIL 27 - ROCK OUTLET PROTECTION III



NOTE: FILTER CLOTH SHALL BE GEOTEXTILE CLASS C

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ROCK OUTLET PROTECTION

CONSTRUCTION SPECIFICATIONS

1. The subgrade for the filter, rip-rap, or gabion shall be prepared to the required lines and grades. Any fill required in the subgrade shall be compacted to a density of approximately that of the surrounding undisturbed material.

2. The rock or gravel shall conform to the specified grading limits when installed respectively in the rip-rap or filter.

3. Geotextile shall be protected from punching, cutting, or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of geotextile over the damaged part or by completely replacing the geotextile. All overlaps whether for repairs or for joining two pieces of geotextile shall be a minimum of one foot.

4. Stone for the rip-rap or gabion outlets may be placed by equipment. They shall be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of underlying materials. The stone for rip-rap or gabion outlets shall be delivered and placed in a manner that will ensure that it is reasonably homogeneous with the smaller stones and spalls filling the voids between the larger stones. Rip-rap shall be placed in a manner to prevent damage to the filter blanket or geotextile. Hand placement will be required to the extent necessary to prevent damage to the permanent works.

5. The stone shall be placed so that it blends in with the existing ground. If the stone is placed too high then the flow will be forced out of the channel and scour adjacent to the stone will occur.

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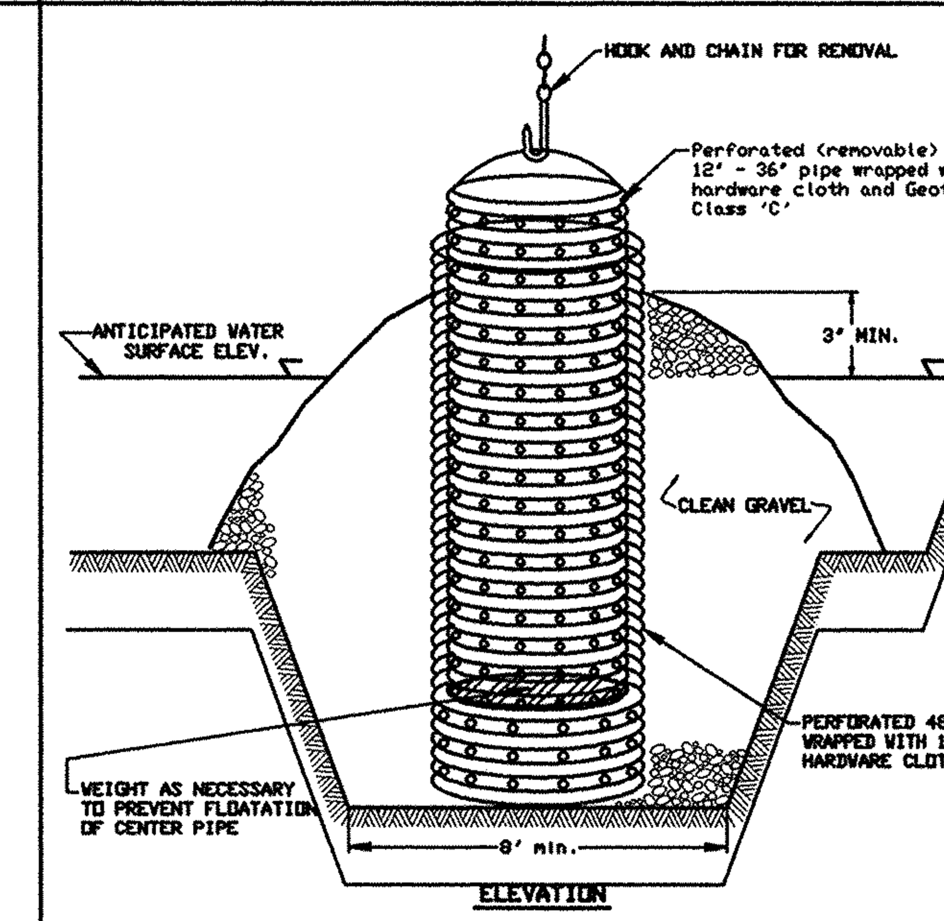
DETAIL 20A - REMOVABLE PUMPING STATION



Construction Specifications

1. The outer pipe should be 48" dia. or shall, in any case, be at least 4" greater in diameter than the center pipe. The outer pipe shall be wrapped with 1/2" hardware cloth to prevent backfill material from entering the perforations.

2. After installing the outer pipe, backfill around outer pipe with 2" aggregate or clean gravel.

3. The inside stand pipe (center pipe) should be constructed by perforating a corrugated or PVC pipe between 12" and 36" in diameter. The perforations shall be 1/2" X 6" slits or 1" diameter holes 6" on center. The center pipe shall be wrapped with 1/2" hardware cloth first, then wrapped again with Geotextile Class C.

4. The center pipe should extend 12" to 18" above the anticipated water surface elevation or riser crest elevation when dewatering a basin.

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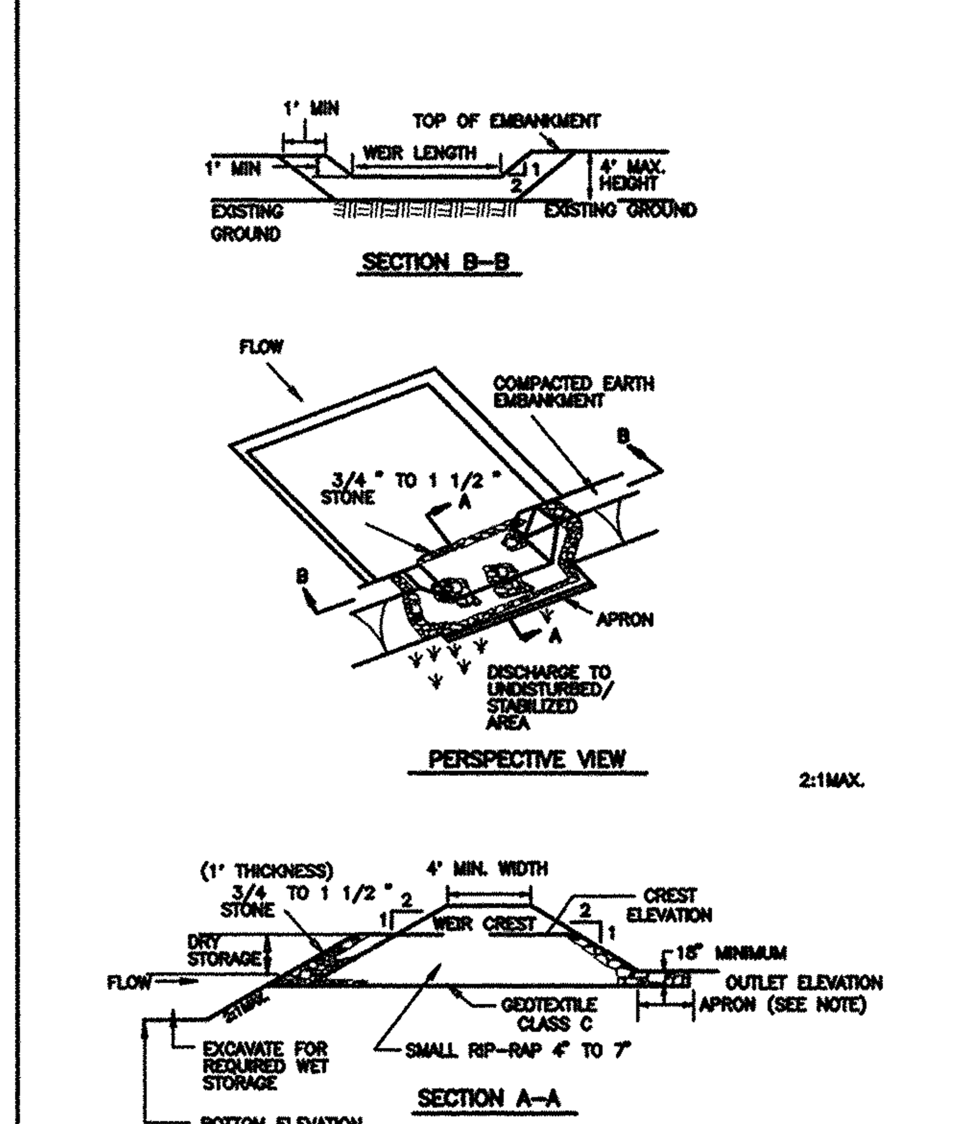
DET. 10A - STONE/RIP-RAP OUTLET SEDIMENT TRAP - ST IV



NOTE: 5' MIN LENGTH UP TO 5 ACRES. OVER 5 ACRES USE 10' MIN

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STONE RIP-RAP OUTLET SEDIMENT TRAP - ST IV

CONSTRUCTION SPECIFICATIONS

1. The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.

2. The fill material for the embankment shall be free of roots or other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed. Maximum height of embankment shall be 4', measured at centerline of embankment.

3. All cut and fill slopes shall be 2:1 or flatter.

4. Elevation of the top of any dike directing water into trap must equal or exceed the height of trap embankment.

5. Storage area provided shall be figured by computing the volume measured from top of excavation. (For storage requirements see Table 9).

6. Geotextile Class C shall be placed over the bottom and sides of the outlet channelprior to placement of stone. Section of fabric must overlap at least 1' with section nearest the entrance placed on top. Fabric shall be embedded at least 6" into existing ground at entrance of outlet channel.

7. 4" - 7" stone shall be used to construct the weir and 4" - 12" or Class I rip-rap shall be used to construct the outlet channel.

8. Outlet - An outlet shall include a means of conveying the discharge in an erosion free manner to an existing stable channel. Protection against scour at the discharge point shall be provided as necessary.

9. Outlet channel must have positive drainage from the trap.

10. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 of the wet storage depth of the trap (900 cf/ac). Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.

11. The structure shall be inspected periodically after each rain and repaired as needed.

12. Construction of traps shall be carried out in such a manner that sediment pollution is abated. Once constructed, the top and outside face of the embankment shall be stabilized with seed and mulch. Points of concentrated inflow shall be protected in accordance with Grade Stabilization Structure criteria. The remainder of the interior slopes should be stabilized (one time) with seed and mulch upon trap completion and monitored and maintained erosion free during the life of the trap.

13. The structure shall be dewatered by approved methods, removed and the area stabilized when the drainage area has been properly stabilized.

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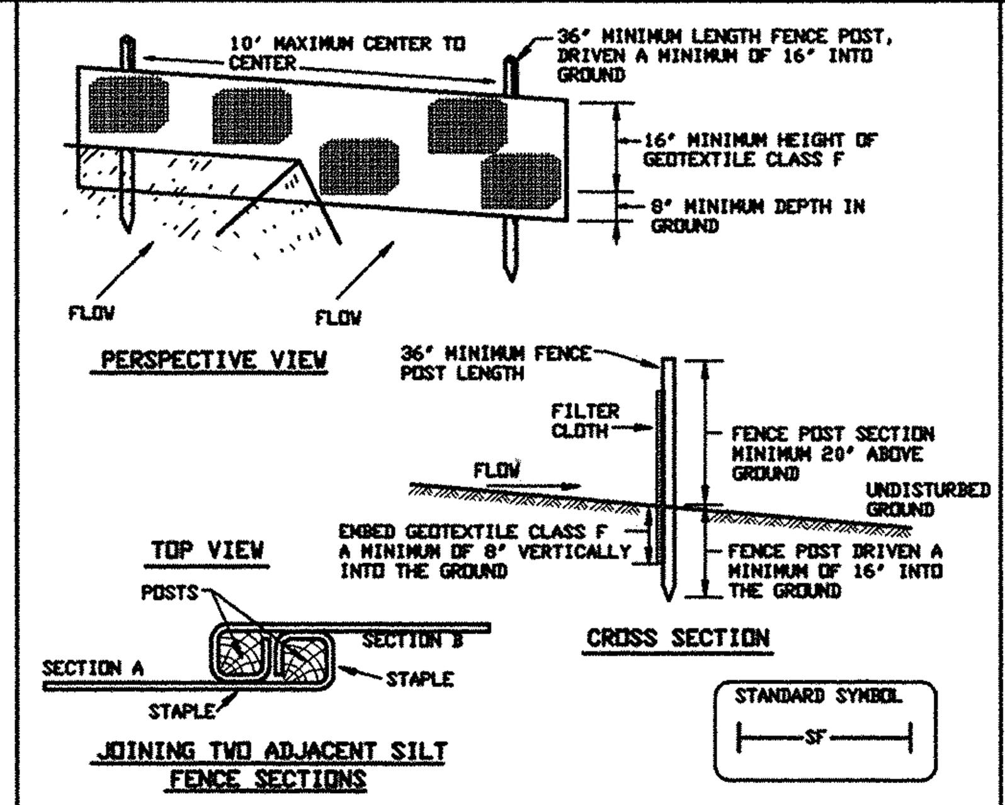
DETAIL 22 - SILT FENCE



CONSTRUCTION SPECIFICATIONS

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.

2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft²/ minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

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DETAIL 4 - PIPE SLOPE DRAIN

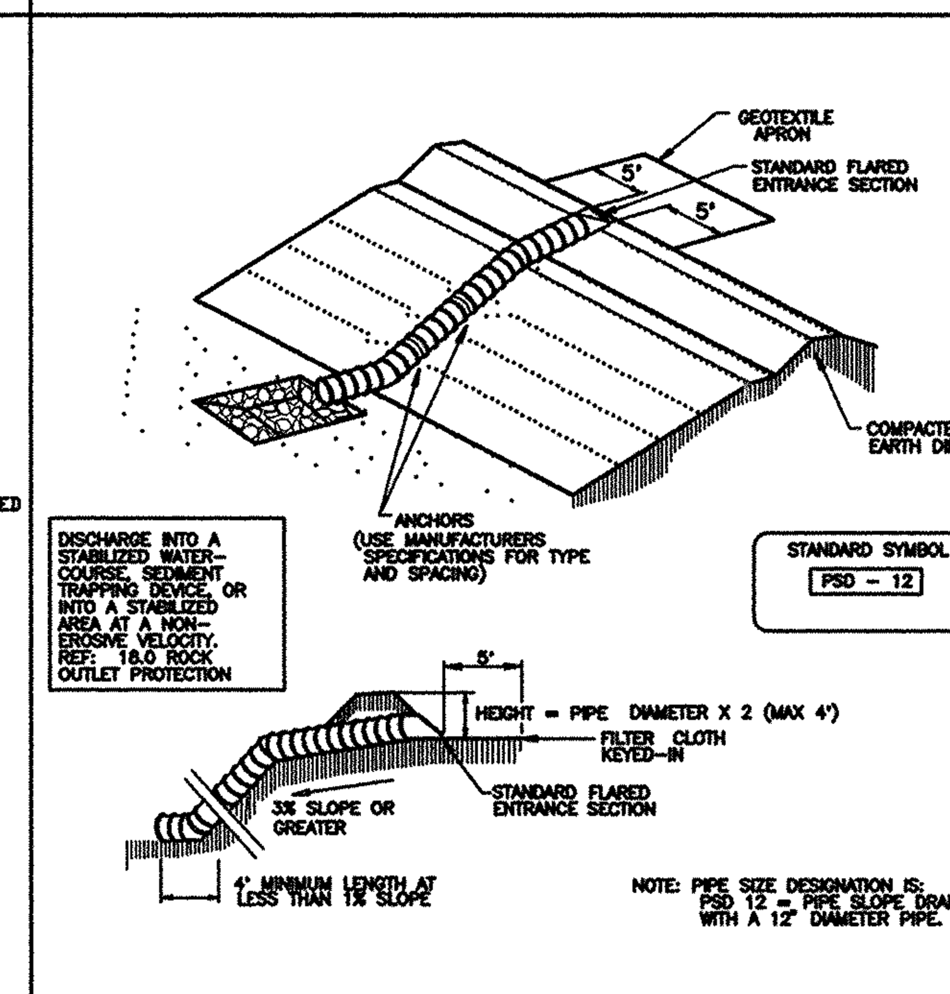

Table 6 Design Criteria for Pipe Slope Drain

Size	Pipe/Tubing Diameter (D) in	Maximum Drainage Area (Acres)
PSD-12	12	0.5
PSD-18	18	1.5
PSD-21	21	2.5
PSD-24	24	3.5
PSD-24 (2)	24	5.0

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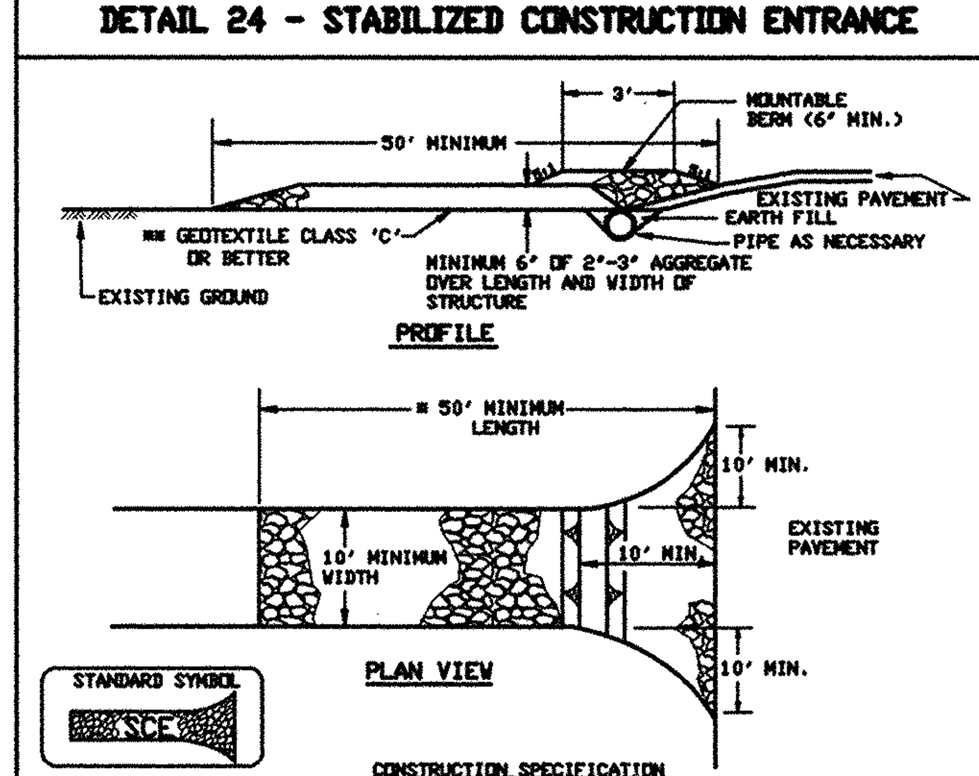
DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



CONSTRUCTION SPECIFICATION

1. Length - minimum of 50' (*30' for single residence lot).

2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.

3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.

4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.

5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.

6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

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STABILIZED CONSTRUCTION ENTRANCE

CONSTRUCTION SPECIFICATIONS

1. Length - minimum of 50' (*30' for single residence lot).

2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.

3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.

4. Stone - crushed aggregate (2" to 3"), or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.

5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.

6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

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SUPER SILT FENCE

Design Criteria

Slope	Slope Steepness	Slope Length (maximum)	Silt Fence Length (maximum)
0 - 10%	0 - 10:1	Unlimited	Unlimited
10 - 20%	10:1 - 5:1	200 feet	1,500 feet
20 - 33%	5:1 - 3:1	100 feet	1,000 feet
33 - 50%	3:1 - 2:1	100 feet	500 feet
50% +	2:1 +	50 feet	250 feet

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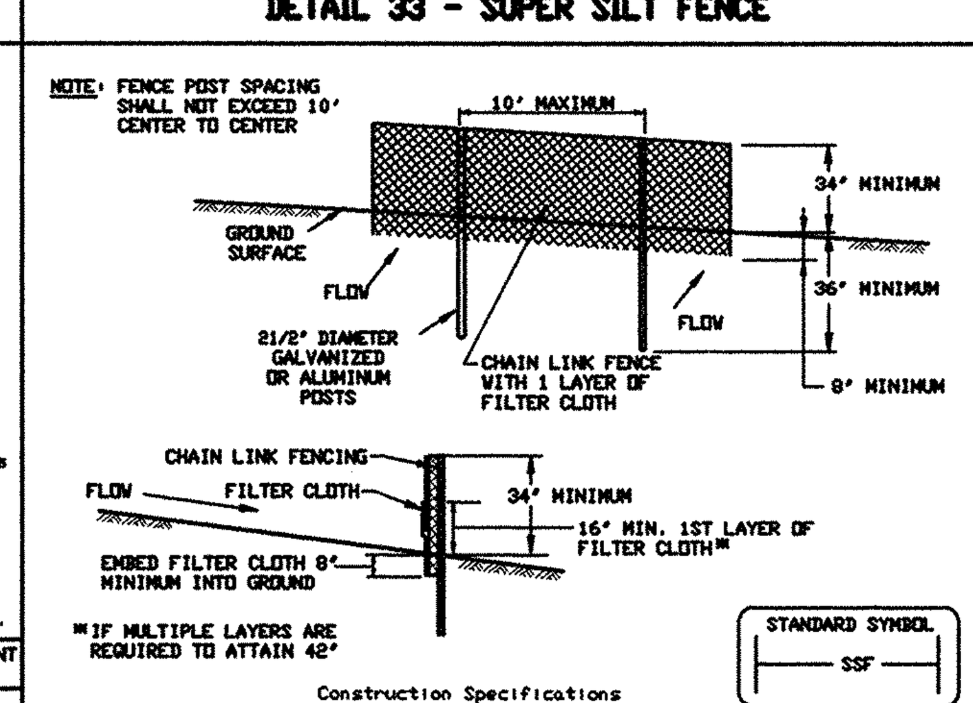
DETAIL 33 - SUPER SILT FENCE

NOTE: FENCE POST SPACING SHALL NOT EXCEED 10' CENTER TO CENTER



*IF MULTIPLE LAYERS ARE REQUIRED TO ATTAIN 42"

Construction Specifications

1. Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.

2. Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.

3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.

4. Filter cloth shall be embedded a minimum of 8" into the ground.

5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.

6. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height

7. Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal/ft²/minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

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PIPE SLOPE DRAIN

PIPE SLOPE DRAIN
Construction Specifications - Pipe Slope Drain
PIPE SLOPE DRAIN

1. The Pipe Slope Drain (PSD) shall have a slope of 3 percent or steeper.

2. The top of the earth dike over the inlet pipe shall be at least 2 times the pipe diameter measured at the invert of the pipe.
pipe.
3. Flexible tubing is preferred. However, corrugated metal pipe or equivalent PVC pipe can be used. All connections shall be watertight.
pipe.
4. A flared end section shall be attached to the inlet end of pipe with a watertight connection. Filter cloth shall be placed under the inlet of the pipe slope drain and shall extend out 5' from the inlet. The filter cloth shall be "keyed in" on all sides.
pipe.
5. The Pipe Slope Drain shall be securely anchored to the slope by staking at the grommets provided. Spacing for anchors shall be as provided by manufacturer's specification. In no case shall less than two (2) anchors be provided, equally spaced along the length of pipe. These details should be provided by pipe suppliers.
pipe.
pipe.
6. The soil around and under the pipe and end section shall be hand tamped in 4 inch lifts to the top of the earth dike.

7. All pipe connections shall be watertight.

8. Whenever possible where a PSD drains an unstabilized area, it shall outlet into a sediment trap or basin. If this is not possible then the slope drain will discharge into a stable conveyence that leads to a sediment trap or basin. When discharging into a trap or basin the PSD shall discharge at the same elevation as the wet pool elevation. The discharge from the PSD must be as far away from the sediment control outlet as possible.

9. When the drainage area is stabilized, the PSD shall discharge onto a stabilized area at a non-erosive velocity.

10. Inspection and any required maintenance shall be performed periodically and after each rain event.

11. The inlet must be kept open at all times.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE B - 5 - 4A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTIONWILL BE DONE IN ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. ~~I/WE WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~ I/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

[signature] 5-1-98
JOSEPH NAZARIO / OWNER — DATE
NAZARIO DEVELRMENT AND COMPANY

BY THE ENGINEER:

I/WE CERTIFY THAT THIS PLAN FOR ~~POND CONSTRUCTION,~~ SOIL EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. ~~I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~

[signature] 05-01-98
FRED L. SKELTON - MD. REGISTRATION No. 9070 — DATE
IPDS, LLC

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

Cheryl J Simmons 9/13/98
NATURAL RESOURCES CONSERVATION SERVICE — DATE

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

John L Robertson 9/13/98
HOWARD SOIL CONSERVATION DISTRICT — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

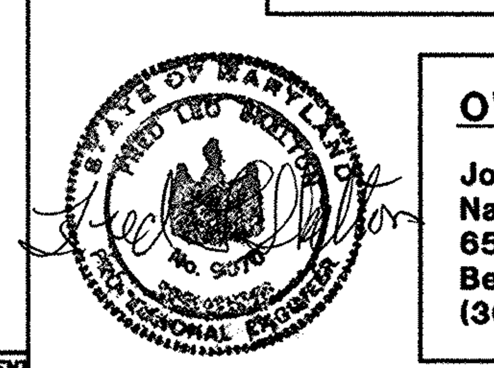
[signature] 10/6/98
DIRECTOR — DATE

[signature] 10/5/98
CHIEF, DIVISION OF LAND DEVELOPMENT — DATE

[signature] 10/1/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE

AS BUILT CERTIFICATE

FRED L. SKELTON - MD. REGISTRATION No. 9070 — DATE
IPDS, LLC



OWNER \ DEVELOPER

Joseph Nazario
Nazario Development and Company
6500 Ammendale Road
Beltsville, Maryland 20705
(301) 937-4664

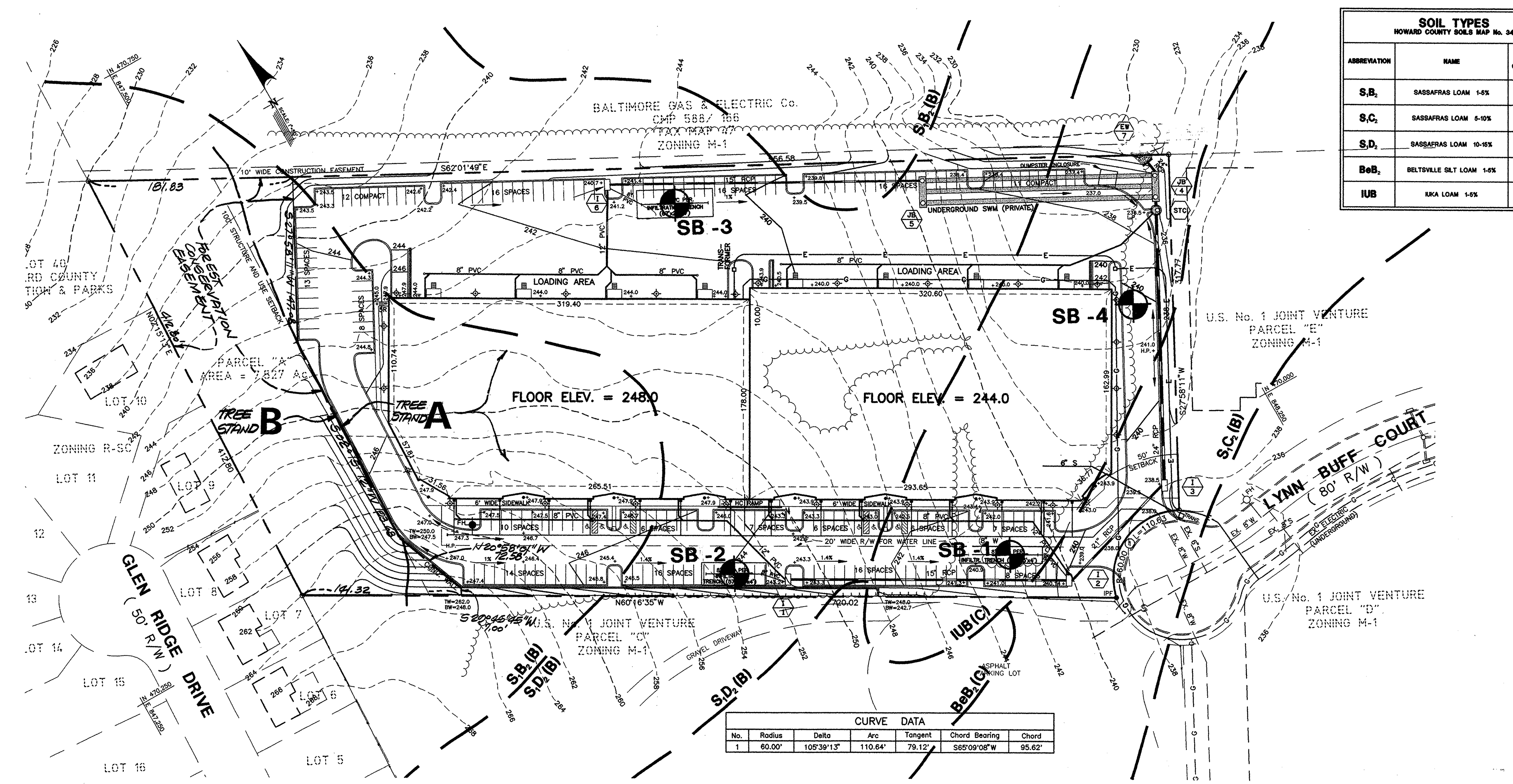
IPDS
The Interprofessional PLANNING & DESIGN STUDIO, LLC
Engineers • Architects • Surveyors
Planners & Landscape Architects
802 Sligo Avenue
Silver Spring, Maryland, 20910
(301) 585-5676

EROSION AND SEDIMENT CONTROL DETAILS & NOTES

U.S. No.1 JOINT VENTURE
PARCEL "A", PLAT CMP No. 3592, WAREHOUSE
GUILFORD ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND
CENSUS TRACT 6069.02, TAX MAP 47, BLOCK 22/23
WATER CODE C04, SEWER CODE 7220000

SCALE: NONE
04-30-98
REVISIONS: 01-06-98
DATE:
JOB NUMBER:
SC-2
SHEET 12 OF 13

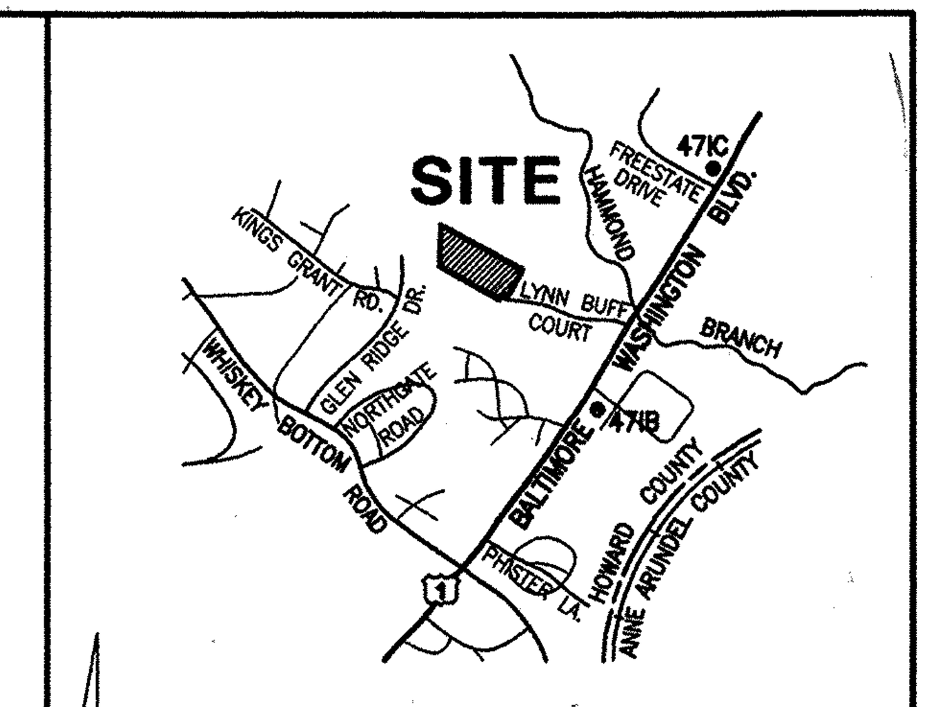
SDP-98-135



CURVE DATA						
No.	Radius	Delta	Arc	Tangent	Chord Bearing	Chord
1	60.00'	105°39'13"	110.64'	79.12'	S65°09'08"W	95.62'

SOIL TYPES
HOWARD COUNTY SOILS MAP No. 34

ABBREVIATION	NAME	SCD SOIL CLASSIFICATION
S_1B_2	SASSAFRAS LOAM 1-5%	B
S_1C_2	SASSAFRAS LOAM 5-10%	B
S_1D_2	SASSAFRAS LOAM 10-15%	B
BeB_2	BELTSVILLE SILT LOAM 1-5%	C
IUB	IUKA LOAM 1-5%	C



VICINITY MAP
SCALE: 1"=2000'
HOWARD Co. MAP PAGE 20; GRID B-10

TREE STAND DELINEATION
NAZARIO - LYNN BUFF COURT
Howard County, Maryland

SITE LOCATION

Lynn Buff Court, Parcel "A"

METHODOLOGY

Data were collected on this site using the 1/10th acre point method and information presented complies with the minimum requirements of the Maryland Department of Natural Resources Forest Conservation Manual (1991).

STAND CONDITION

The site area is approximately 7.5 acres and is forested with the exception of minor areas disturbed during construction of the street.

The condition of the forested areas is described by Stand. Data sheets for each stand describe forest structure and forest stand condition.

The areas as shown on the plan are described in more detail in the following paragraphs supported by field data sheets (see appendix).

Stand A

This Stand consists of approximately 6.5 acres of secondary Pine growth. Most of this area will be cleared for the proposed development (see attached Forest Structure Analysis and Forest Stand Summary Sheets).

Stand B

Stand B is approximately 1.0 acre and consists of mature hardwood forest. This area is to be protected and maintained as buffer area toward the Kings Grant Subdivision. Areas disturbed as part of the grading operation will be replanted with caliper stock plant material (see Landscaping plan).

MAFI ASSOCIATES, INC.
RECORD OF SOIL EXPLORATION

Project Name: LYNN BUFF CT
Project Number: 198LYN
Page 1 of 1
Coordination: N/A — Surf. Elev.: 245 +(-) — Date Started: 04-17-98
Boring Location: Please see soil boring location map — Water Table: No groundwater was encountered during drilling. — Date Finished: 04-10-98
Soil Boring #1 — Checked By: A.T — Job # 1

Sample #	Soil Description	Strat.	Depth	Con	Sample	Legend
	Surface: Organic top soil	0"-6"	0			
S-1	Wet, darkgrey sandy silt with trace of organics (ML) moisture content - 41.7%	6"-2.5'	2.5'		HAB	ML
S-2	Moist, lightbrown, firm clayey sandy silt (ML) Moisture content - 26.8%	2.5'-8'	5.0'		HAB	
S-3	Same as S2, medium stiff, moisture content 27.4%, "ML".		7.5'		HAB	
S-4	Light yellowish brown silty sand, trace of gravel, moist, medium dense, moisture content 21.4%, "SM"	8'-15'	10.0'			SM
S-5	Same as S-4 sample, medium dense, moisture content 21.8%, "SM"		15'			
			20			

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. PT-PRESSED SHELBY TUBE; CA-CONTINUOUS FLIGHT AUGER; RC-ROCK CORE
SAMPLE CONDITIONS: D-DISINTEGRATED; I-INTACT; U-UNDISTURBED; L-LOST
GROUND WATER DEPTH: AT COMPLETION ___ Feet; AFTER ___ Feet; AFTER ___ Feet
BORING METHOD: HSA-Hollow Stem Augers; CFA-Cont. Flight Augers; HAB-Hand Auger Boring
STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30";COUNT MADE AT 6" INTERVALS

MAFI ASSOCIATES, INC.
RECORD OF SOIL EXPLORATION

Project Name: LYNN BUFF COURT
Project Number: 198LYN
Page 1 of 1
Coordination: N/A — Surf. Elev.: 245 +(-) — Date Started: 04-17-98
Boring Location: Please see soil boring location map — Water Table: No groundwater was encountered during drilling. — Date Finished: 04-10-98
Soil Boring #2 — Checked By: A.T — Job # 1

Sample #	Soil Description	Strat.	Depth Blow 6"	Con	Sample	Legend
	Surface: Organic top soil	0"-6"	0			
S-1	Moist, light brown firm silty sand, presence of roots (SM) moisture content - 17.9%	6"-5.0'	2.5'		HAB	SM
S-2	Same as S-1, Moisture content - 17.0%		5.0'		HAB	
S-3	Moist, light brown coarse grained sand, trace of clay (SM), moisture content - 17.4%	5'-13.0'	7.5'		HAB	
S-4	Same as S-3, moisture content - 15.2%		10.0'		HAB	
S-5	Same as S-3, moisture content - 12.4%. Auger refusal at 13.0', boring terminated.				HAB	
			15'			
			20			

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. PT-PRESSED SHELBY TUBE; CA-CONTINUOUS FLIGHT AUGER; RC-ROCK CORE
SAMPLE CONDITIONS: D-DISINTEGRATED; I-INTACT; U-UNDISTURBED; L-LOST
GROUND WATER DEPTH: AT COMPLETION ___ Feet; AFTER ___ Feet; AFTER ___ Feet
BORING METHOD: HSA-Hollow Stem Augers; CFA-Cont. Flight Augers; HAB-Hand Auger Boring
STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30";COUNT MADE AT 6" INTERVALS

MAFI ASSOCIATES, INC.
RECORD OF SOIL EXPLORATION

Project Name: LYNN BUFF COURT
Project Number: 198LYN
Page 1 of 1
Coordination: N/A — Surf. Elev.: 236 +(-) — Date Started: 04-17-98
Boring Location: Please see soil boring location map — Water Table: No groundwater was encountered during drilling. — Date Finished: 04-10-98
Soil Boring #3 — Checked By: A.T — Job # 1

Sample #	Soil Description	Strat.	Depth	Con	Sample Blow 6"	Legend
	Surface: Organic top soil	0"-6"	0			
S-1	Moist, light brown silty sand (SM) Moisture content - 18.7%	6"-5'	2.5'		HAB	SM
S-2	Same as S-1, moisture content - 17.1%		5.0'		HAB	
S-3	Light greyish brown silty sand with trace of clay (SM) Moisture content - 18.5%	5.0-7.5'	7.5'		HAB	ML
S-4	Moist, firm light grey sandy silt (ML) Moisture content - 15.0%	7.5'-10'	10.0'		HAB	SM
S-5	Moist, pink coarse grained sand, trace of clay (SM) Moisture content - 8.9%	10'-12.5'			HAB	
S-6	Moist light yellowish brown coarse grained sand (SM) Moisture content - 10.6%. Boring terminated at 15.0 feet.	12.5'-15'	15'		HAB	
			20			

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. PT-PRESSED SHELBY TUBE; CA-CONTINUOUS FLIGHT AUGER; RC-ROCK CORE
SAMPLE CONDITIONS: D-DISINTEGRATED; I-INTACT; U-UNDISTURBED; L-LOST
GROUND WATER DEPTH: AT COMPLETION ___ Feet; AFTER ___ Feet; AFTER ___ Feet
BORING METHOD: HSA-Hollow Stem Augers; CFA-Cont. Flight Augers; HAB-Hand Auger Boring
STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30";COUNT MADE AT 6" INTERVALS

MAFI ASSOCIATES, INC.
RECORD OF SOIL EXPLORATION

Project Name: LYNN BUFF COURT
Project Number: 198LYN
Page 1 of 1
Coordination: N/A — Surf. Elev.: 236 +(-) — Date Started: 04-17-98
Boring Location: Please see soil boring location map — Water Table: Groundwater was encountered at (-)5 feet — Date Finished: 04-10-98
Soil Boring #4 — Checked By: A.T — Job # 1

Sample #	Soil Description	Strat.	Depth	Con	Sample Blow 6"	Legend
	Surface: Organic top soil	0"-6"	0			
S-1	Moist, greyish brown sandy silt with with some gravel and trace of clay, some roots observed.(ML) Moisture content - 21.5%	6"-2.5'	2.5'		HAB	ML
S-2	Moist, yellowish brown silty gravel with sand (SM) Moisture content - 15.9%. Auger refusal at 5.0 feet, boring terminated	2.5'-5'	5.0'		HAB	
S-3			7.5'			
S-4			10.0'			
S-5						
			15'			
			20			

SAMPLER TYPE: DRIVEN SPLIT SPOON UNLESS OTHERWISE NOTED. PT-PRESSED SHELBY TUBE; CA-CONTINUOUS FLIGHT AUGER; RC-ROCK CORE
SAMPLE CONDITIONS: D-DISINTEGRATED; I-INTACT; U-UNDISTURBED; L-LOST
GROUND WATER DEPTH: AT COMPLETION ___ Feet; AFTER ___ Feet; AFTER ___ Feet
BORING METHOD: HSA-Hollow Stem Augers; CFA-Cont. Flight Augers; HAB-Hand Auger Boring
STANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30";COUNT MADE AT 6" INTERVALS

IPDS, LLC.
THE INTERPROFESSIONAL PLANNING & DESIGN SERVICES, LLC.
802 SLIGO AVENUE, SILVER SPRING, MD 20910
TELEPHONE (301) 585-5676
FACSIMILE (301) 585-8088

May 6, 1998

Howard County, Maryland
Soil Conservation District
9025 Chevrolet Drive
Suite J
Ellicott City, Maryland 21042

RE: **NAZARIO - LYNN BUFF COURT**
US #1 Joint Venture
SDP# 98-88

This is to certify that the investigation was conducted on the above referenced project regarding wetlands. Based on criteria for delineation of wetlands contained in the Federal Manual for Identifying and Delineation Jurisdictional Wetland none of the areas could be considered wetlands.

Wetlands, however, could be found off-site on the B G & E right of way. This development is not expected to impact those areas adversely.

Siegfried W. Teichler
Reg. #230

STATE OF MARYLAND — SIEGFRIED W. TEICHLER — NO. 230 — REGISTERED LANDSCAPE ARCHITECT

ARCHITECTURAL & URBAN DESIGN • LANDSCAPE ARCHITECTURE • SITE PLANNING & ENGINEERING • COMPREHENSIVE PLANNING
COMMUNITY & NEW TOWN PLANNING • URBAN / RURAL RENEWAL • SOCIO-ECONOMIC ANALYSIS • LAND SURVEYING

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR	DATE 10/6/98
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 10/5/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 10/1/98

AS BUILT CERTIFICATE

FRED L. SKELTON - MD. REGISTRATION No. 9070 — DATE
IPDS, LLC

OWNER \ DEVELOPER

Joseph Nazario
Nazario Development and Company
6500 Ammendale Road
Beltsville, Maryland 20705
(301) 937-4664

802 Sligo Avenue
Silver Spring, Maryland, 20910
(301) 585-5676
IPDS
The Interprofessional PLANNING & DESIGN STUDIO, LLC
Engineers • Architects • Surveyors
Planners & Landscape Architects

SOILS AND ENVIRONMENTAL ANALYSIS

U.S. No.1 JOINT VENTURE
PARCEL "A", PLAT CMP No. 3592, WAREHOUSE
GUILFORD ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND
CENSUS TRACT 6069.02, TAX MAP 47, BLOCK 22/23
WATER CODE C04, SEWER CODE 7220000

SCALE: 1"=50'
04-30-98
REVISIONS:
01-18-98
DATE:
JOB NUMBER:

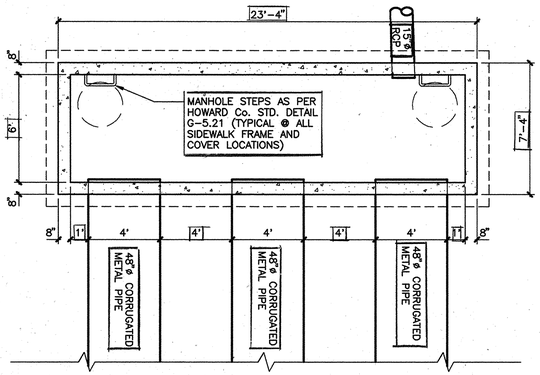
S-1
SHEET 13 OF 13

SDP-98-135

CERTIFICATE

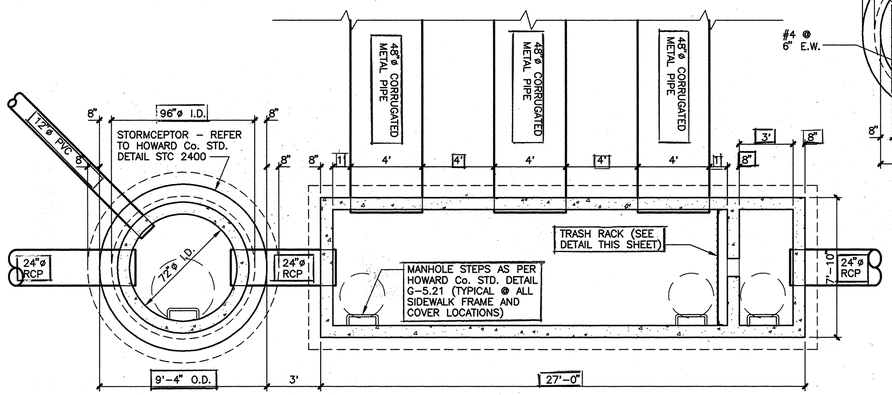
I hereby certify that to the best of my knowledge that this "As-Built" truly represents existing field conditions including, but not limited to sizes, diameters, line and grade, and elevations.

Fred L. Skelton (SEAL)
Fred L. Skelton, P.E.
MD Reg. No. 9070
03-14-01



JUNCTION BOX No. 5 - PLAN VIEW

SCALE: 1/4"=1'-0"



JUNCTION BOX No. 4 - PLAN VIEW

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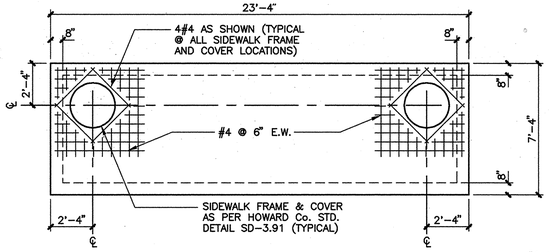

Box NOT EXPOSED

JUNCTION BOX No. 5 - TOP SLAB DETAIL

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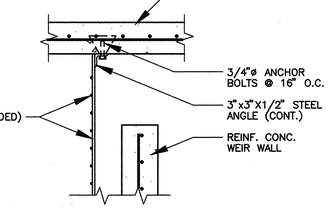
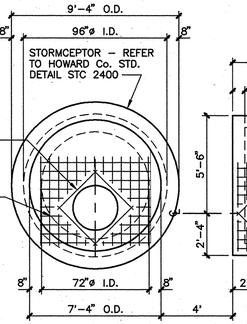
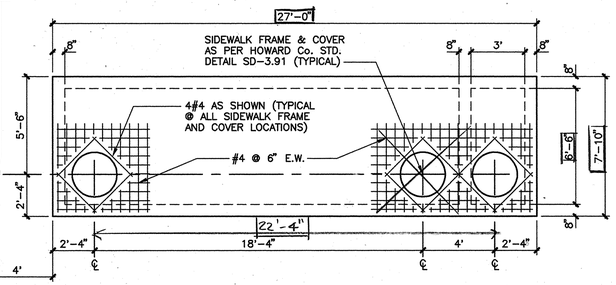


DETAIL - TRASH RACK

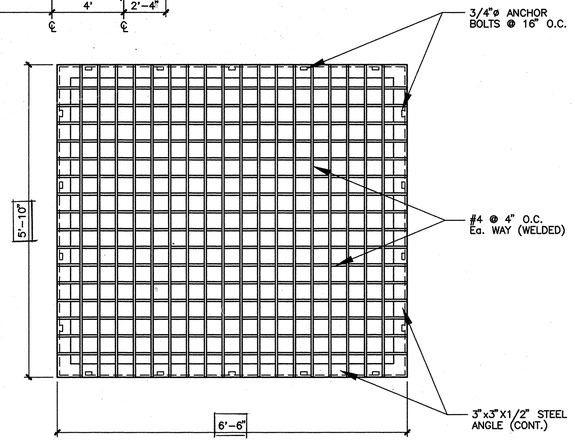
SCALE: 3/4"=1'-0"





JUNCTION BOX No. 4 - TOP SLAB DETAIL

SCALE: 1/4"=1'-0"



ELEVATION - TRASH RACK

SCALE: 3/4"=1'-0"

UNDERGROUND PIPE STORAGE (PRIVATE)

SPECIFICATIONS FOR CONSTRUCTION

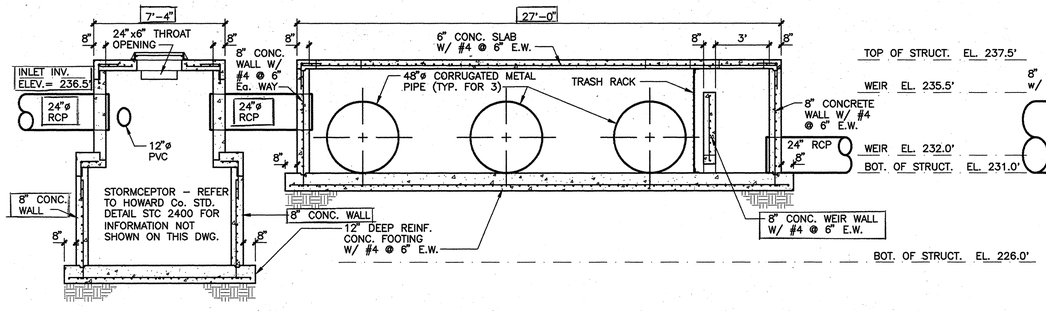
1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER AND HOWARD COUNTY FOR APPROVAL PRIOR TO COMMENCING WORK.
2. ALL WORK SHALL BE PLACED ON UNDISTURBED SUBGRADE. ANY OVER-EXCAVATION SHALL BE BACKFILLED WITH CR-6 CRUSHED RUN AND COMPACTED TO 95% AASHTO UNDER DIRECTION OF ENGINEER. NO CONSTRUCTION SHALL BE PLACED ON WET OR FROZEN GROUND.
3. ALL WELDING SHALL BE DONE BY MANUFACTURER'S WELDER. WELDS SHALL BE WATERPROOFED PRIOR TO BACKFILLING AND FINAL INSPECTION.
4. ALL STEEL USED FOR STORAGE STRUCTURE SHALL BE CORRUGATED STEEL ALUMINIZED PIPE, 12 GUAGE.
5. THE CONTRACTOR SHALL GUARANTEE TOTAL RUST-PROOFING OF THE STEEL PIPE.
6. PIPES SHALL BE BEDDED IN 12" OF SAND.
7. MINIMUM COVER SHALL BE 18".

NOTES

1. REFER TO ARMCO, INC. METAL PRODUCTS DIVISION (OR EQUAL AND APPROVED) FOR LOCATIONS OF WELDED CONNECTIONS.
2. SHOP DRAWINGS TO BE SUBMITTED TO HOWARD COUNTY AND THE ENGINEER PRIOR TO CONSTRUCTION.

GENERAL NOTES:

1. CONCRETE STRENGTH SHALL BE fc' = 5000 PSI @ 28 DAYS.
2. ALL REINFORCING STEEL TO BE ASTM A615 GRADE 60.
3. PROVIDE MINIMUM 3" CONCRETE COVER ON ALL BELOW GRADE REINFORCING STEEL, UNLESS OTHERWISE SPECIFIED. PROVIDE MINIMUN 2" CONCRETE COVER ON ALL ABOVE GRADE REINFORCING STEEL, UNLESS OTHERWISE SPECIFIED.
4. FOR INFORMATION NOT SHOWN REFER TO DER STD. DTL. SD/10.0 AND SD/10.1.
5. ALL LAP REINFORCEMENT TO BE 32 TIMES REBAR DIAMETER (MIN.).
6. FOR PRECAST STRUCTURE SUBMIT SHOP DRAWINGS TO PERMITS AND REVIEW DIVISION FOR APPROVAL.
7. PROVIDE WATERTIGHT JOINTS AT ALL WALL PENETRATIONS.



JUNCTION BOX No. 4 - LONGITUDINAL SECTION

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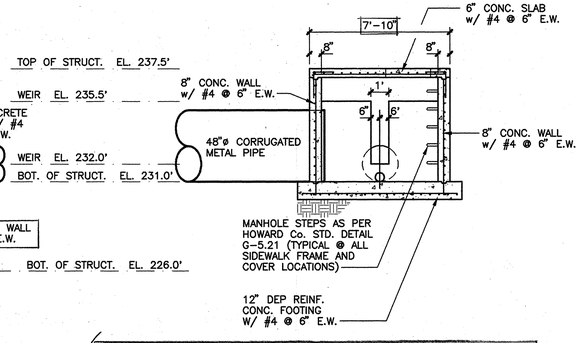
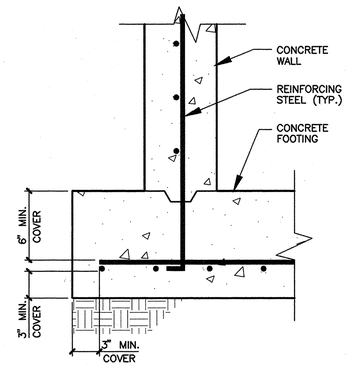


JUNCTION BOX No. 4 - CROSS SECTION

SCALE: 1/4"=1'-0"



TYPICAL FOOTING DETAIL

NO SCALE

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTIONWILL BE DONE IN ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. ~~I/WE WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~ I/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

JOSEPH NAZARIO - OWNER
NAZARIO DEVELPMENT AND COMPANY — 5-1-98 DATE

BY THE ENGINEER:

I/WE CERTIFY THAT THIS PLAN FOR ~~POND CONSTRUCTION~~, SOIL EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. ~~I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~

FRED L. SKELTON - MD. REGISTRATION No. 9070
IPDS, LLC — 6/6/98 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE — 9/30/98 DATE

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — 9/30/98 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — 10/6/98 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT — 10/5/98 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — 10/1/98 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

N/A

DIRECTOR — DATE

CHIEF, BUREAU OF ENGINEERING — DATE

AS BUILT CERTIFICATE

Fred L. Skelton — 03-14-01

FRED L. SKELTON - MD. REGISTRATION No. 9070
IPDS, LLC — DATE

OWNER \ DEVELOPER

Joseph Nazario
Nazario Development and Company
6500 Ammendale Road
Beltsville, Maryland 20705
(301) 937-4664

IPDS
The Interprofessional PLANNING & DESIGN STUDIO, LLC
802 Sligo Avenue
Silver Spring, Maryland, 20910
(301) 585-5676
Engineers • Architects • Surveyors
Planners & Landscape Architects

STORMWATER MANAGEMENT DETAILS

U.S. No.1 JOINT VENTURE
PARCEL "A", PLAT CMP No. 3592, WAREHOUSE
GUILFORD ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND
CENSUS TRACT 6069.02, TAX MAP 47, BLOCK 22/23
WATER CODE C04, SEWER CODE 7220000

AS NOTED — SCALE:
06-18-98 — REVISIONS:
01-18-98 — DATE:
JOB NUMBER:

SWM-3
SHEET 10 OF 13

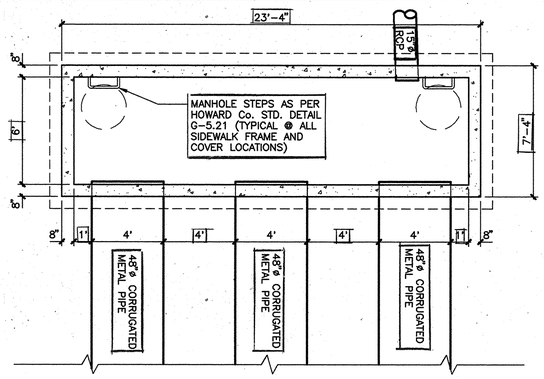
SDP-98-135

SDP-98-135

CERTIFICATE

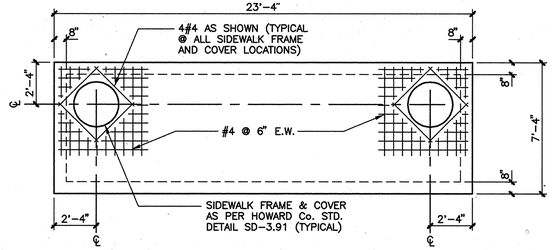
I hereby certify that to the best of my knowledge that this "As-Built" truly represents existing field conditions including, but not limited to sizes, diameters, line and grade, and elevations.

Fred L. Skelton (SEAL)
Fred L. Skelton, P.E.
MD Reg. No. 9070
03-14-01



JUNCTION BOX No. 5 - PLAN VIEW

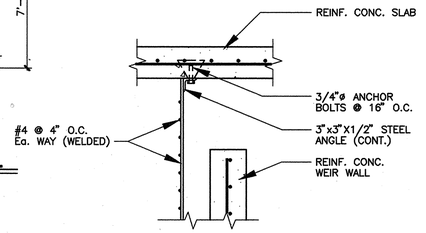
SCALE: 1/4"=1'-0"



Box NOT EXPOSED

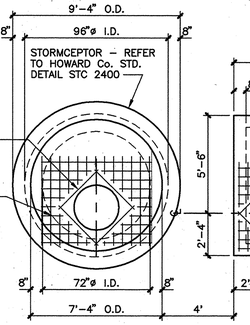
JUNCTION BOX No. 5 - TOP SLAB DETAIL

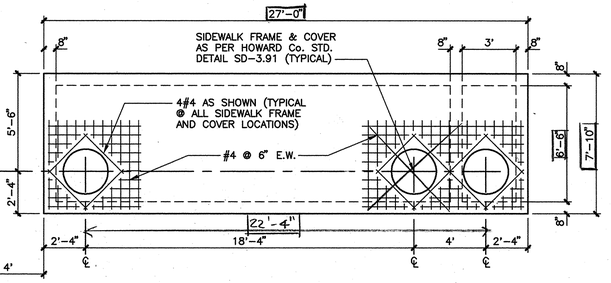
SCALE: 1/4"=1'-0"



DETAIL - TRASH RACK

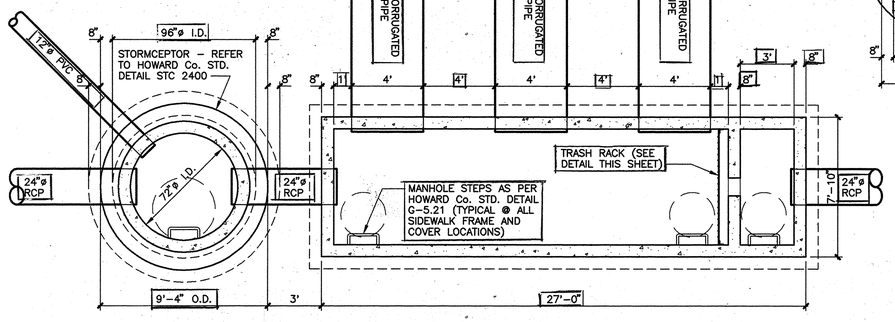
SCALE: 3/4"=1'-0"





JUNCTION BOX No. 4 - TOP SLAB DETAIL

SCALE: 1/4"=1'-0"



JUNCTION BOX No. 4 - PLAN VIEW

SCALE: 1/4"=1'-0"

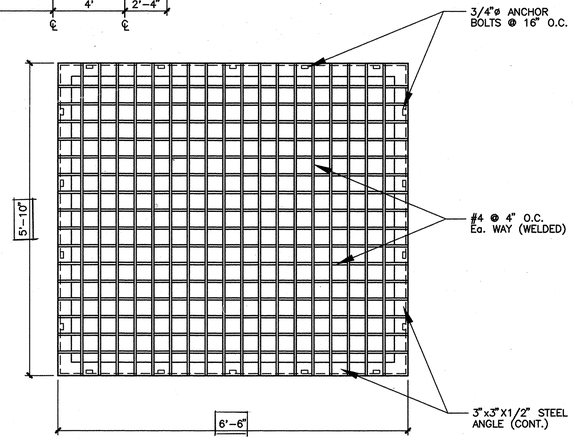
UNDERGROUND PIPE STORAGE (PRIVATE)

SPECIFICATIONS FOR CONSTRUCTION

1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO ENGINEER AND HOWARD COUNTY FOR APPROVAL PRIOR TO COMMENCING WORK.
2. ALL WORK SHALL BE PLACED ON UNDISTURBED SUBGRADE. ANY OVER-EXCAVATION SHALL BE BACKFILLED WITH CR-6 CRUSHED RUN AND COMPACTED TO 95% AASHTO UNDER DIRECTION OF ENGINEER. NO CONSTRUCTION SHALL BE PLACED ON WET OR FROZEN GROUND.
3. ALL WELDING SHALL BE DONE BY MANUFACTURER'S WELDER. WELDS SHALL BE WATERPROOFED PRIOR TO BACKFILLING AND FINAL INSPECTION.
4. ALL STEEL USED FOR STORAGE STRUCTURE SHALL BE CORRUGATED STEEL ALUMINIZED PIPE, 12 GUAGE.
5. THE CONTRACTOR SHALL GUARANTEE TOTAL RUST-PROOFING OF THE STEEL PIPE.
6. PIPES SHALL BE BEDDED IN 12" OF SAND.
7. MINIMUM COVER SHALL BE 18".

NOTES

1. REFER TO ARMCO, INC. METAL PRODUCTS DIVISION (OR EQUAL AND APPROVED) FOR LOCATIONS OF WELDED CONNECTIONS.
2. SHOP DRAWINGS TO BE SUBMITTED TO HOWARD COUNTY AND THE ENGINEER PRIOR TO CONSTRUCTION.

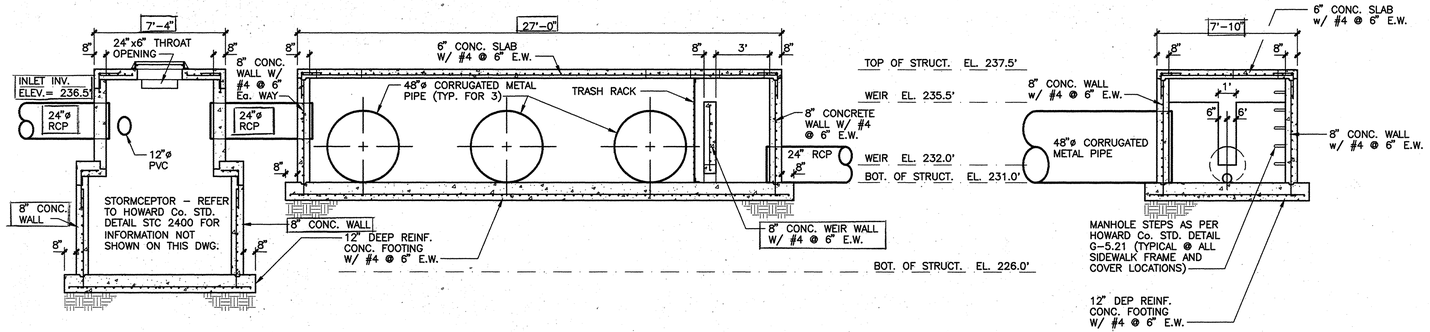


ELEVATION - TRASH RACK

SCALE: 3/4"=1'-0"

GENERAL NOTES:

1. CONCRETE STRENGTH SHALL BE fc' = 5000 PSI @ 28 DAYS.
2. ALL REINFORCING STEEL TO BE ASTM A615 GRADE 60.
3. PROVIDE MINIMUM 3" CONCRETE COVER ON ALL BELOW GRADE REINFORCING STEEL, UNLESS OTHERWISE SPECIFIED. PROVIDE MINIMUN 2" CONCRETE COVER ON ALL ABOVE GRADE REINFORCING STEEL, UNLESS OTHERWISE SPECIFIED.
4. FOR INFORMATION NOT SHOWN REFER TO DER STD. DTL. SD/10.0 AND SD/10.1.
5. ALL LAP REINFORCEMENT TO BE 32 TIMES REBAR DIAMETER (MIN.).
6. FOR PRECAST STRUCTURE SUBMIT SHOP DRAWINGS TO PERMITS AND REVIEW DIVISION FOR APPROVAL.
7. PROVIDE WATERTIGHT JOINTS AT ALL WALL PENETRATIONS.

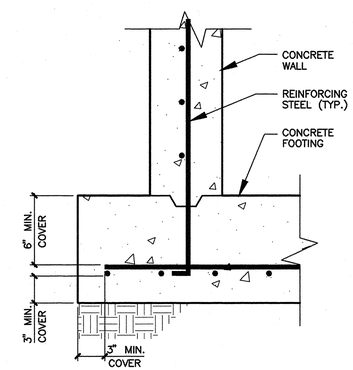


JUNCTION BOX No. 4 - LONGITUDINAL SECTION

SCALE: 1/4"=1'-0"

JUNCTION BOX No. 4 - CROSS SECTION

SCALE: 1/4"=1'-0"



TYPICAL FOOTING DETAIL

NO SCALE

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTIONWILL BE DONE IN ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. ~~I/WE WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~ I/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

JOSEPH NAZARIO / OWNER
NAZARIO DEVELPMENT AND COMPANY — 5-1-98 DATE

BY THE ENGINEER:

I/WE CERTIFY THAT THIS PLAN FOR ~~POND CONSTRUCTION~~, SOIL EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. ~~I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~

FRED L. SKELTON - MD. REGISTRATION No. 9070
IPDS, LLC — 6/6/98 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

U.S. SOIL CONSERVATION SERVICE — 9/30/98 DATE

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT — 9/30/98 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — 10/6/98 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT — 10/5/98 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION — 10/1/98 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS.

N/A

DIRECTOR — DATE

CHIEF, BUREAU OF ENGINEERING — DATE

AS BUILT CERTIFICATE

Fred L. Skelton — 03-14-01 DATE

FRED L. SKELTON - MD. REGISTRATION No. 9070
IPDS, LLC

OWNER \ DEVELOPER

Joseph Nazario
Nazario Development and Company
6500 Ammendale Road
Beltsville, Maryland 20705
(301) 937-4664

IPDS
The Interprofessional PLANNING & DESIGN STUDIO, LLC
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STORMWATER MANAGEMENT DETAILS

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06-18-98 — REVISIONS:
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SWM-3
SHEET 10 OF 13

SDP-98-135

SDP-98-135

SITE DEVELOPMENT PLAN

U.S. No. 1 JOINT VENTURE

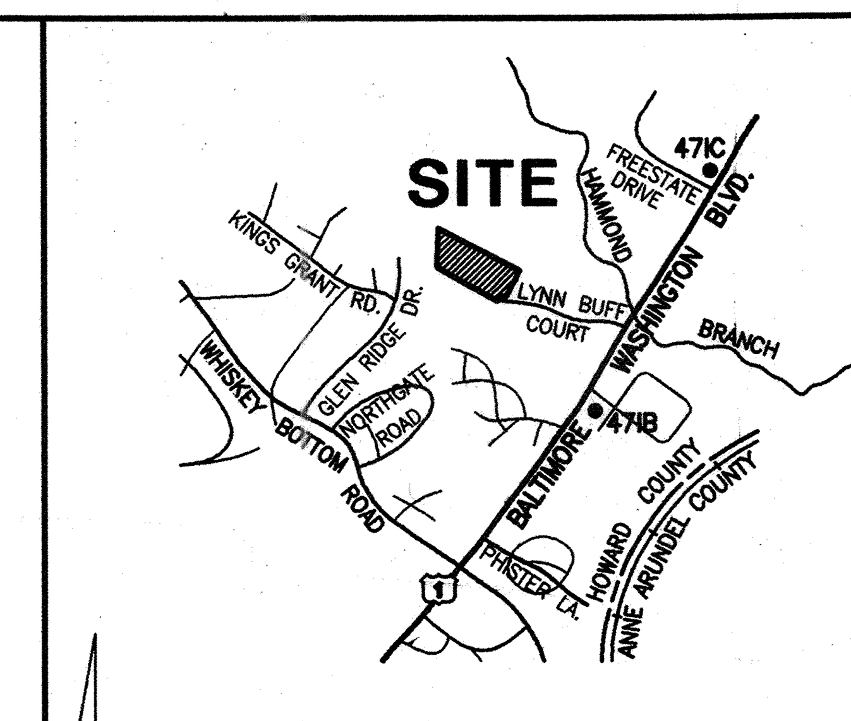
PARCEL "A", PLAT CMP No. 3592, WAREHOUSE

GUILFORD ELECTION DISTRICT No. 6

HOWARD COUNTY, MARYLAND

CENSUS TRACT 6069.02, TAX MAP 47, BLOCK 22/23

WATER CODE C04, SEWER CODE 7220000



VICINITY MAP
SCALE: 1"=2000'
HOWARD Co. MAP PAGE 20; GRID B-10

802 Sligo Avenue
Silver Spring, Maryland, 20910
(301) 585-5676

IPDS
The Interprofessional
PLANNING & DESIGN STUDIO, LLC
Engineers • Architects • Surveyors
Planners & Landscape Architects

COVER SHEET

LIST OF DRAWINGS

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS, BUREAU OF ENGINEERING, AND CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
4. TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTED). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
5. ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED. THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH TWO FOOT CONTOUR INTERVALS PREPARED BY JOYCE ENGINEERING CORPORATION, DATED OCTOBER, 1987.
6. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 47IB AND 47IC WERE USED FOR THIS PROJECT.
7. WATER IS PUBLIC, EX. WHC. CONTRACT No. 667-D-W&S.
8. SEWER IS PUBLIC, EX. SHC. CONTRACT No. 667-D-W&S.
9. STORMWATER MANAGEMENT CONTROL IS TO BE PROVIDED BY PRIVATE UNDERGROUND STORAGE PIPES WITH INFILTRATION TRENCHES AND WILL BE MAINTAINED BY THE OWNER OF PROPERTY.
10. THERE IS NO FLOODPLAIN ON SITE.
11. THERE ARE NO WETLANDS ON THIS SITE.
12. NO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT.
13. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
14. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
15. THE CONTRACTOR SHALL PROVIDE A JOINT IN ALL SEWER MAINS WITHIN 2'-0" OF EXTERIOR MANHOLE WALLS.
16. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
17. NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT TO SUBGRADE.
18. ALL STORM DRAIN PIPE BEDDING SHALL BE AS SHOWN IN DETAIL G2.01 (TRENCH IN ROCK OR TRENCH IN EARTH AS DETERMINED BY FIELD CONDITIONS) IN VOL. IV. OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR AS SHOWN ON THE DRAWINGS.
19. THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS-OF-WAY THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORM WATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORM WATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN THIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS-OF-WAY AND/OR WORK ON ADJACENT PROPERTIES INCLUDED IN THIS PLAN.
20. THE OWNER SHALL PROVIDE A SEPARATE AND INDEPENDENT SEWER CONNECTION FOR EACH TENANT OR OCCUPANT OF ANY BUILDING, SHOWN ON THIS SITE DEVELOPMENT PLAN, WHO WILL DISCHARGE NON-DOMESTIC WASTE TO THE PUBLIC SEWERAGE SYSTEM. IF THIS WASTE IS REGULATED UNDER SECTION 18.122A OF THE HOWARD COUNTY CODE. EACH SEPARATE AND INDEPENDENT SEWER CONNECTION SHALL INCLUDE A STANDARD MANHOLE AND OTHER WATER PRETREATMENT DEVICES AS REQUIRED AND APPROVED BY HOWARD COUNTY. WASTE LINES ON THE INTERIOR OF THE BUILDING SHALL BE DESIGNED, CONSTRUCTED OR MODIFIED SUCH THAT NON-DOMESTIC WASTE WILL BE DISCHARGED TO THE SEPARATE AND INDEPENDENT SEWER CONNECTION. NO PLAN SHALL DISCHARGE REGULATED NON-DOMESTIC WATER TO PUBLIC SEWERAGE SYSTEM PRIOR TO INSTALLATION OF THE SEPARATE AND INDEPENDENT SEWER CONNECTION AND RELATED INTERIOR WASTE LINES. THE ABOVE REQUIREMENTS SHALL APPLY TO ALL INITIAL AND FUTURE OCCUPANTS OR TENANTS.
21. ALL IMPROVEMENTS AS SHOWN ON THESE PLANS WITHIN THE R/W OF LYNN BUFF COURT WILL BE THE RESPONSIBILITY OF THE DEVELOPER.
22. ALL EXTERIOR LIGHTING SHALL CONFORM TO SECTION 134 - OUTDOOR LIGHTING, ZONING REGULATIONS.
23. NO UNDERGROUND/GROUNDWATER TESTING CONDUCTED FOR THE PRESENCE OF CONTAMINANTS AT THIS TIME.
24. WATER METERS SHALL BE LOCATED OUTSIDE THE BUILDING IN THE AREA BETWEEN THE SIDEWALK AND THE PARKING LOT CURB.

SITE TABULATION

PRESENT ZONING	M-1
DEED REFERENCE	L. 454, F. 036
AREA OF PARCEL	7.527 Ac.
PROPOSED USE	WAREHOUSING & PARKING
PROPOSED BUILDING COVERAGE	115,463 SQ. FT.
PROJECTED No. OF EMPLOYEES	50
TOTAL PARKING SPACES REQUIRED:	
@ 0.5 SPACES PER 1000 SF OF 115,463 SQUARE FEET GROSS FLOOR AREA)	58
@ 3.3 SPACES PER 1000 SF OF 40,909 SQUARE FEET MAX. ALLOWABLE MEZZANINE FLOOR AREA (FUTURE GENERAL OFFICE USE)	135
TOTAL REQUIRED	193
TOTAL PARKING SPACES PROVIDED:	
STANDARD (9'x18')	164
COMPACT (8'x16')	23
HANDICAPPED (8'x20')	6
TOTAL SPACES	193
LOADING SPACES	29
LANDSCAPE ISLANDS REQUIRED:	10
1/20 PARKING SPACES	
@ MINIMUM 200 SF EACH	2000 SF
MINIMUM WIDTH = 12'	
DISTURBED AREA	5.7 Ac. (76%)

PARCEL "A" PLAT FILE NUMBER IS F-75-67
NOTE: THIS PLAN WAS PREVIOUSLY SUBMITTED AS SDP-98-88 AND DENIED ON 5/6/98

HOWARD COUNTY GEODETIC CONTROL : 47IB

NGS PID NUMBER : N/A
Station is a 3/4" Iron Rod with a 4" Stamped aluminum cap.
Coordinates based on:
Maryland NAD83 horizontal and NAVD29 vertical datums.
CLASS : Horizontal ...1st Vertical ...2nd
Angles in ddd.mmsss format

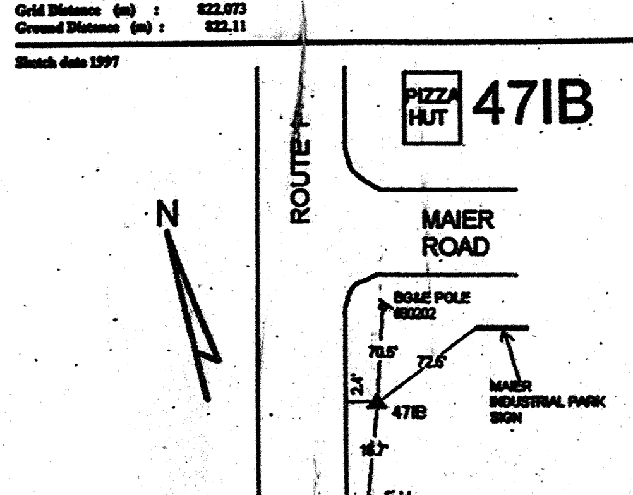
Northing : 161453.3643 m.= 529701.579 ft. Scale Factor : 0.999958979 Lat: 39.0715617449 N
Easting : 414976.8122 m.= 1361469.758 ft. Convergence: 0.06313 Lon: 76.4936507834 W
Elevation: 55.0802 m.= 180.709 ft.

Other Datums Information: NAD27N: 468952.8 ft.(App) NAD27E: 849051.1 ft.(App)
Ellipsoidal Ht. : 22.433 m. NAVD88 Elev: 54.870 m.

County : Howard Area : Rt1
Last Adjustment: 06/15/1996 Last recovery : 04/15/1997

Azimuth Stations : 47IC N/A N/A
Grid Azimuth(d.mmsss): 30.01069
Grid Distance (m) : 822.073
Ground Distance (m) : 822.11

Sketch date 1997



Station is a 3" Aluminum disc set on top of 3/4" Iron Rod.

HOWARD COUNTY GEODETIC CONTROL : 47IC

NGS PID NUMBER : N/A Also : " N/A "
Coordinates based on:
Maryland NAD83 horizontal and NAVD29 vertical datums.
CLASS : Horizontal ...1st Vertical ...2nd
Angles in ddd.mmsss format

Northing : 162165.1670 m.= 532036.885 ft. Scale Factor : 0.999959463 Lat: 30.0738674478 N
Easting : 415388.0797 m.= 1362819.058 ft. Convergence: 0.06421 Lon: 76.4919328834 W
Elevation: 57.6216 m.= 189.047 ft.

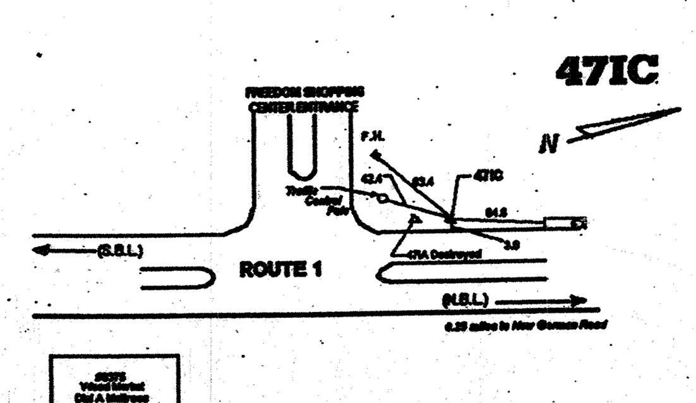
Other Datums Information: NAD27 N: 471288.1 ft.(App) NAD27 E: 850400.5 ft.(App)
Ellipsoidal Ht. : 24.968 m. NAVD88 Elev. : 57.830 m.

County : Howard Area : Rt1
Last Adjustment: 06/15/1996 Last recovery : 04/13/1997

Azimuth Stations : 47IB N/A N/A
Grid Azimuth(d.mmsss): 210.01069
Grid Distance (m) : 822.073
Ground Distance (m) : 822.11

Note: Unless otherwise stated all Howard County survey controls are standard stamped (brass or aluminum) discs set on top of concrete (3' deep) cylindric base. Usually the disc is set 1" or 2" below terrain surface.

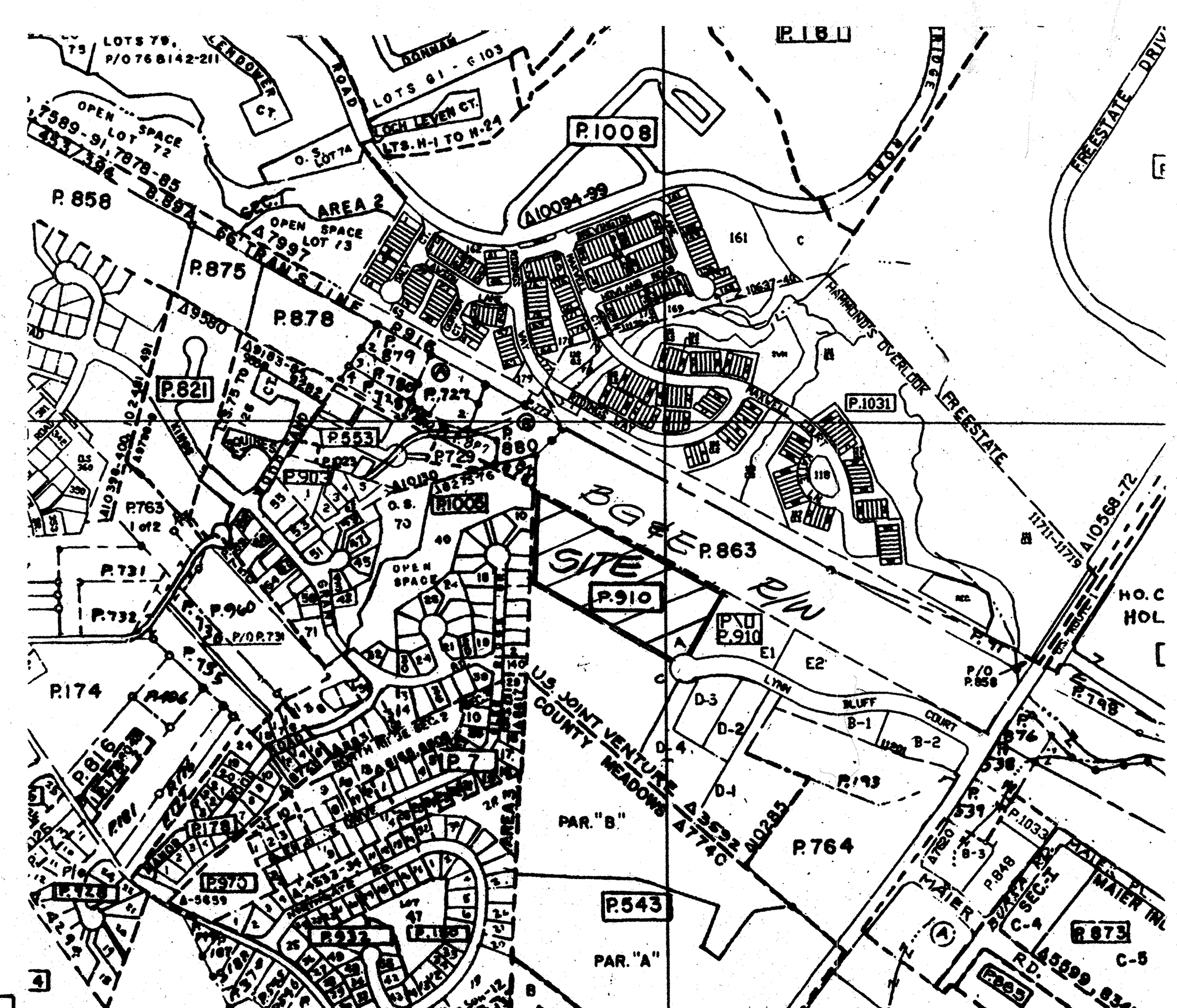
Sketch date 1997



NOTE: SEE VICINITY MAP FOR LOCATIONS OF GEODETIC CONTROL POINTS

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR	DATE 10/6/98
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 10/5/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 10/1/98



TAX MAP
SCALE: 1"=600'

STATE OF MARYLAND
FRED LEO SKELTON
No. 9078
REGISTERED PROFESSIONAL ENGINEER

OWNER \ DEVELOPER
Joseph Nazario
Nazario Development and Company
6500 Ammendale Road
Beltsville, Maryland 20705
(301) 937-4664

SDP-98-135

ADDRESS CHART	
BUILDING	STREET ADDRESS
9590	LYNN BUFF COURT

SUBDIVISION NAME:			SECT./AREA:	PARCEL:	
U.S. No. 1 JOINT VENTURE			N/A	A	
DEED: PLAT 3592	BLOCK: 22/23	ZONING: M-1	TAX MAP No.: 47	ELECTION DISTRICT: 6th	CENSUS TRACT: 6069.02
WATER CODE: C04			SEWER CODE: 7220000		

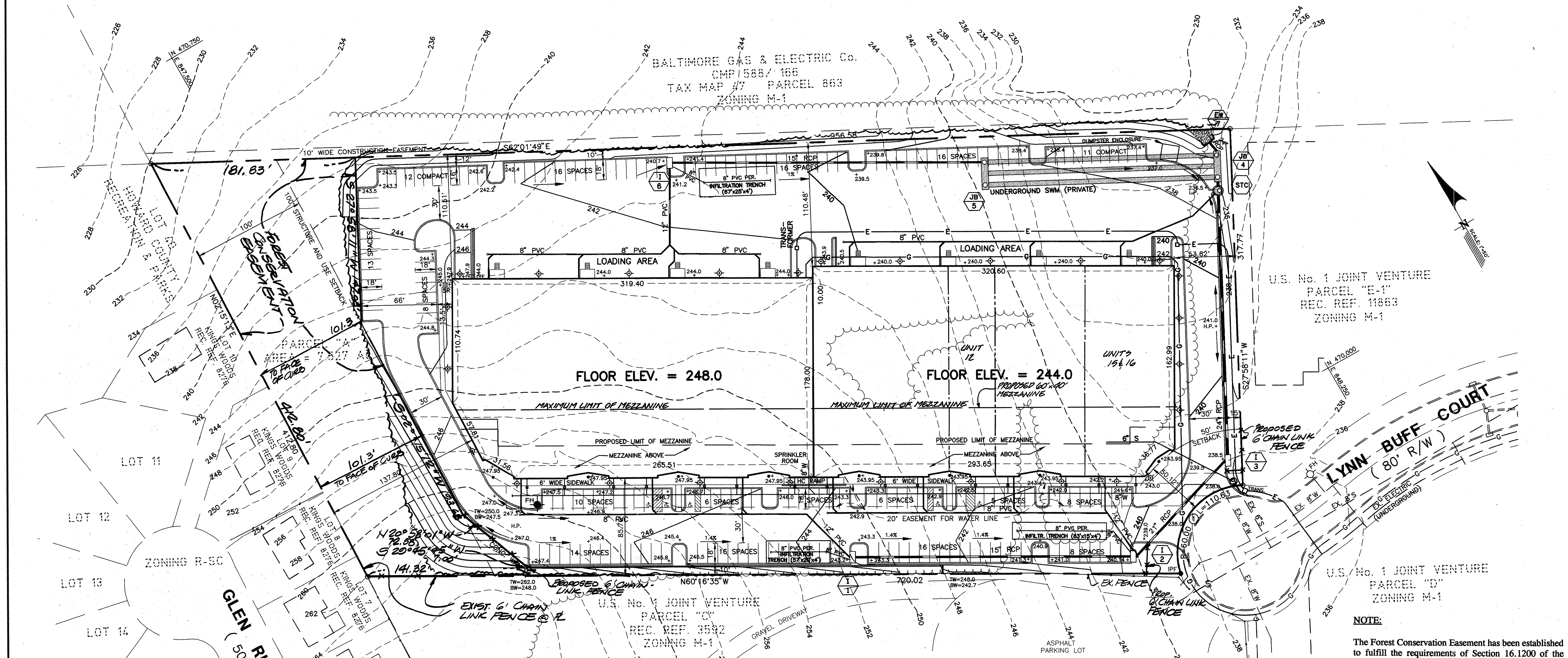
U.S. No.1 JOINT VENTURE
PARCEL "A", PLAT CMP No. 3592, WAREHOUSE
GUILFORD ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND
CENSUS TRACT 6069.02, TAX MAP 47, BLOCK 22/23
WATER CODE C04, SEWER CODE 7220000

SCALE: NONE
06-22-98
REVISIONS:
01-18-98
DATE:
JOB NUMBER:

CS
SHEET 1 OF 13

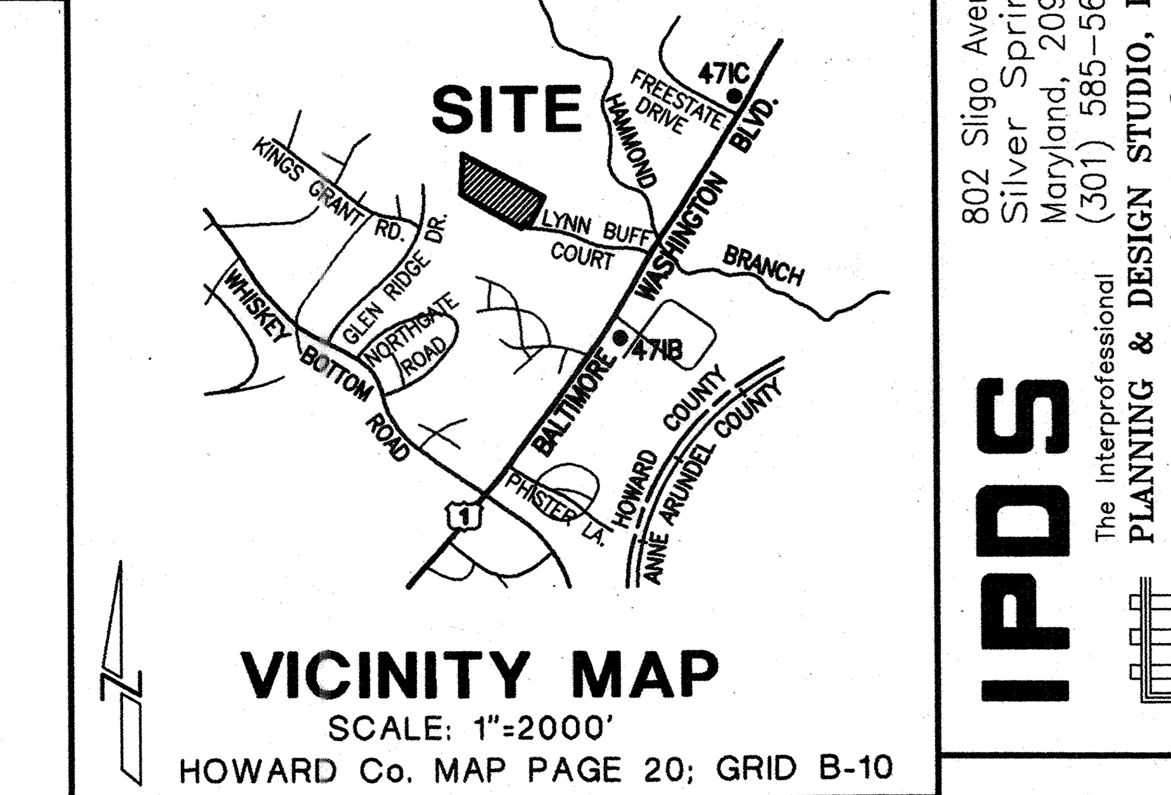
SDP-98-135

Nº	REVISION	DATE
1	ADD PROP. 60'x40' MEZZANINE	12-20-04



NOTE: FOR ADDITIONAL PARKING LOT AND SIDEWALK GRADING INFORMATION REFER TO SHEET "SDP-3".

CURVE DATA						
No.	Radius	Delta	Arc	Tangent	Chord Bearing	Chord
1	60.00'	105°39'13"	110.64'	79.12'	S65°09'08"W	95.62'



NOTE:

The Forest Conservation Easement has been established to fulfill the requirements of Section 16.1200 of the Howard County Code, Forest Conservation Act. No clearing, grading or construction is permitted within the Forest Conservation Easement; however, forest management practices as defined in the Deed of Forest Conservation Easement are allowed.

The portion of the forest conservation obligations incurred by this subdivision (1.68 acres of reforestation) have been met by payment of $21,954.24 to the Howard County Forest Conservation Fund.

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTIONWILL BE DONE IN ACCORDING TO THESE PLANS AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. ~~I/WE WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~ I/WE ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

JOSEPH NAZARIO - OWNER 5-1-98 DATE
NAZARIO DEVELPMENT AND COMPANY

BY THE ENGINEER:

I/WE CERTIFY THAT THIS PLAN FOR ~~POND CONSTRUCTION~~, SOIL EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. ~~I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE PROJECT WITHIN 30 DAYS OF COMPLETION.~~

FRED L. SKELTON - MD. REGISTRATION No. 9070 6/5/98 DATE
IPDS, LLC

THESE PLANS SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

NATURAL RESOURCES CONSERVATION SERVICE 9/30/98 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL

HOWARD SOIL CONSERVATION DISTRICT 9/30/98 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

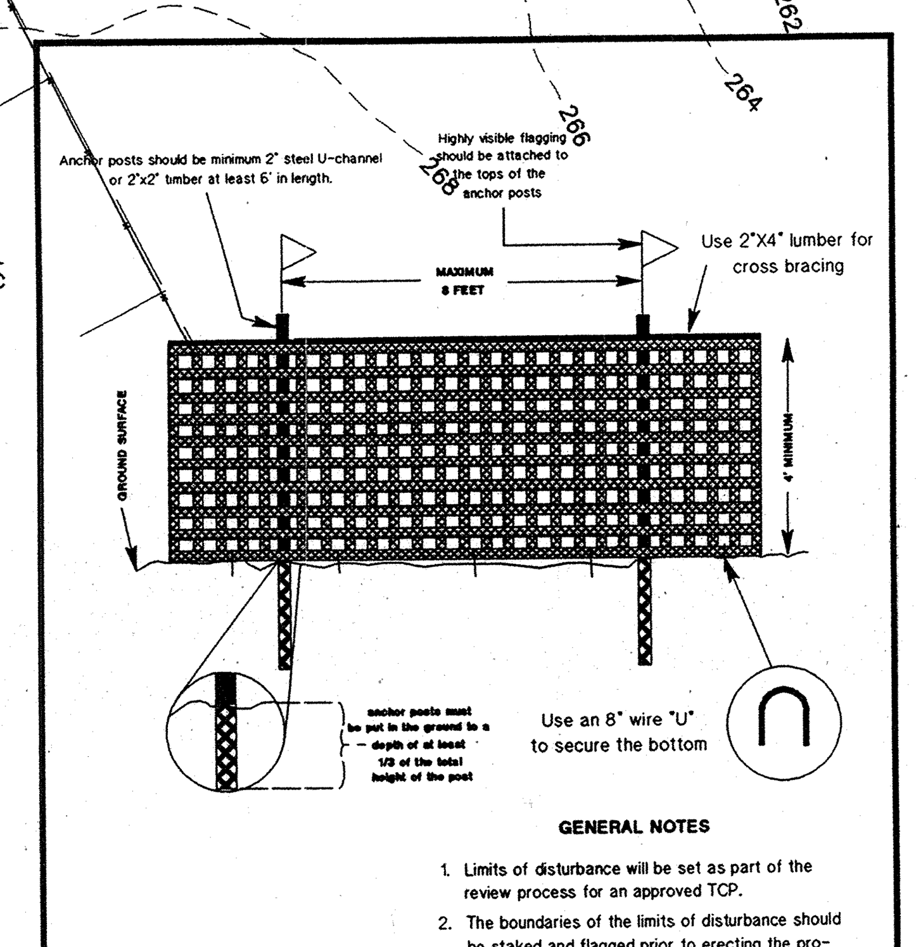
DIRECTOR 10/6/98 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT 10/5/98 DATE

CHIEF, DEVELOPMENT ENGINEERING DIVISION 10/1/98 DATE

STATE OF MARYLAND
FRED LEO SKELTON
No. 9070
REGISTERED PROFESSIONAL ENGINEER

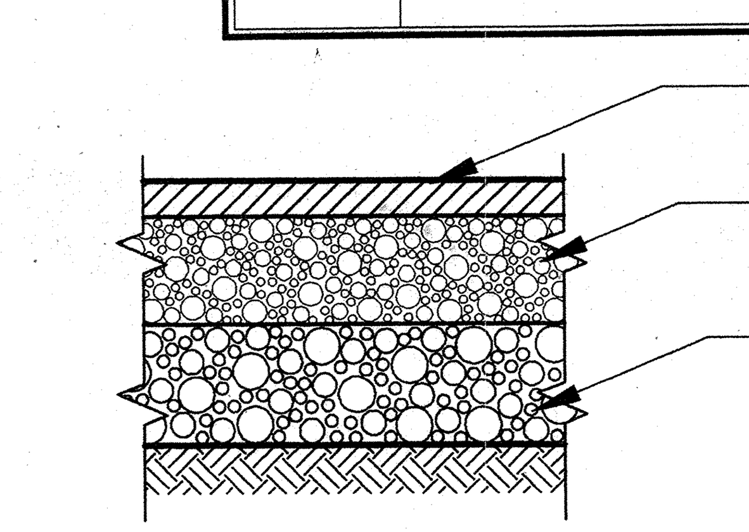
ADJACENT PROPERTY OWNERS	
PROPERTY	OWNER
KINGS WOODS SECTION 1, AREA 1 LOT 6	GARY KUYKENDALL 9536 GLEN RIDGE DR. LAUREL, MARYLAND 20723
KINGS WOODS SECTION 1, AREA 1 LOT 7	MELANIE McKNIGHT 9540 GLEN RIDGE DR. LAUREL, MARYLAND 20723
KINGS WOODS SECTION 1, AREA 1 LOT 8	THIEREY BREANT 9544 GLEN RIDGE DR. LAUREL, MARYLAND 20723
KINGS WOODS SECTION 1, AREA 1 LOT 9	HIEN V. ONG 9548 GLEN RIDGE DR. LAUREL, MARYLAND 20723
KINGS WOODS SECTION 1, AREA 1 LOT 10	ROBERT MARTINEZ 9552 GLEN RIDGE DR. LAUREL, MARYLAND 20723
KINGS WOODS SECTION 1, AREA 1 LOT 40	HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS
CMP 588/166 TAX MAP 47	BALTIMORE GAS & ELECTRIC Co. P.O. BOX 1475 BALTIMORE, MARYLAND 21203-1475
U.S. No. 1 JOINT VENTURE PARCEL "E"	LYNN BUFF LIMITED PARTNERS 9550 LYNN BUFF CT. LAUREL, MARYLAND 20723-6324
U.S. No. 1 JOINT VENTURE PARCEL "C"	STEFINTRACO A. SWISS CORPORATION c/o GREGORY PNELL 8401 CONNECTICUT AVE. CHEVY CHASE, MARYLAND 20815



GENERAL NOTES

1. Limits of disturbance will be set as part of the review process for an approved TCP.
2. The boundaries of the limits of disturbance should be staked and flagged prior to erecting the protective device.
3. Anchor posts should be placed to avoid severing or damaging large tree roots.
4. Fencing material should be fastened securely to the anchor posts, cross bracing, and ground

	TREE PROTECTIVE DEVICE BLAZE ORANGE PLASTIC MESH	TPD-G OPTION 3



TYPICAL ON-SITE PAVING SECTION No. P-3

SCALE: 1 1/2"=1'-0"

GENERAL PAVING NOTES

1. All roadway construction shall be in accordance with the General Specifications for Highway and street Construction, the Howard County Code and the Howard County Road Ordinance.
2. Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location and elevation of the mains by digging test pits by hand at utility crossings well in advance of trenching. If clearances to water and sewer lines are less than shown on this plan or twelve (12) inches, contact the Engineer before proceeding with construction.
3. All elevations shown on these plans are referred to Maryland State and Howard County vertical datum.
4. All roadway fillet radii shall be 25 feet, unless otherwise noted.
5. All unpaved areas within the property or right-of-way shall be sodded.
6. All curb and gutter shall be in accordance with Howard County Standard No. R-3.01.
7. All sidewalks shall be in accordance with Howard County Standard No. R-3.05, unless otherwise noted.
8. Provide Standard No. R-4.01 sidewalk ramps Type A at locations shown on the plans.
9. The pavement subgrade is to be approved by the Howard County Inspector prior to installation of Base Course.
10. Underdrain system shall be installed when warranted by field conditions or as required by the Howard County Inspector.

LEGEND

DESCRIPTION	EXISTING	PROPOSED
PROPERTY LINE	℗ — — —	
TREELINE	︶︶︶︶	
CONTOUR LINE	— — 250 — —	—— 250 ——
SPOT ELEVATION		+250
STORMDRAIN PIPE	==========	▬▬▬
LIMIT OF DISTURBANCE		—— L.O.D. ——
SILT FENCE		—— S.F. ——
HANDICAPPED SPACE		♿
FIRE HYDRANT	FH	FH
CURB & GUTTER	═ ═ ═ ═	═══════
WHEELCHAIR RAMP		✳
TOP OF WALL		T.W.
BOTTOM OF WALL		B.W.
WATER METER VAULT (3/4" METER & 1" WHC)		Ⓥ
SITE LIGHTING FIXTURE MOUNTED ON BLDG.		⌖

OWNER \ DEVELOPER

Joseph Nazario
Nazario Development and Company
6500 Ammendale Road
Beltsville, Maryland 20705
(301) 937-4664

IPDS
The Interprofessional PLANNING & DESIGN STUDIO, LLC
Engineers • Architects • Surveyors
Planners & Landscape Architects
802 Sligo Avenue
Silver Spring, Maryland, 20910
(301) 585-5676

SITE DEVELOPMENT PLAN

U.S. No.1 JOINT VENTURE

PARCEL "A", PLAT CMP No. 3592, WAREHOUSE
GUILFORD ELECTION DISTRICT No. 6
HOWARD COUNTY, MARYLAND
CENSUS TRACT 6069.02, TAX MAP 47, BLOCK 22/23
WATER CODE C04, SEWER CODE 7220000

SCALE: 1"=50'

REVISIONS: 07-13-98 06-18-98

DATE: 12-18-97

JOB NUMBER:

SDP-1

SHEET 2 OF 13

SDP-98-135

SDP-98-135